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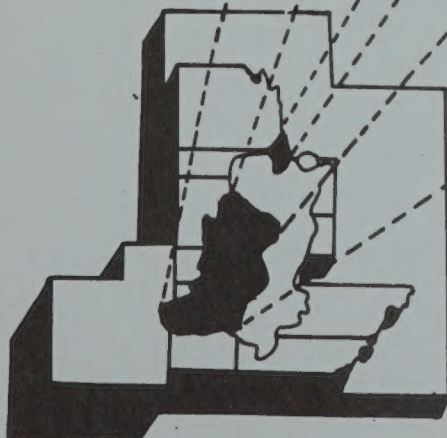
PRESENT AND PROJECTED RESOURCE USE AND MANAGEMENT BEAVER RIVER BASIN

APPENDIX II, Pt. 2

(Water Budget Analysis)
Supplement

JUNE 1973

UTAH
NEVADA



Prepared By
UNITED STATES
DEPARTMENT of AGRICULTURE
Economic Research Service - Forest Service
Soil Conservation Service
In cooperation with
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APPENDIX II

WATER BUDGET ANALYSIS SUPPLEMENT

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June 1973

The following publications have been prepared under the Beaver River Basin study:

Summary Report

- Appendix I Natural Resource Inventory
 Soils Supplement
- Appendix II Present and Projected Resource Use and Management
 Water Related Land Use Supplement
 Water Budget Analysis Supplement
- Appendix III Resource Related Problems
- Appendix IV Economic Base and Needs
- Appendix V Potential Development Opportunities
 Irrigation Systems Supplement

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APPENDIX II

WATER BUDGET ANALYSIS SUPPLEMENT

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INTRODUCTION

The "Water Budget Analysis Supplement" is part of Appendix II, "Present and Projected Resource Use and Management". Appendix II is one of five appendixes prepared during the Beaver River Study. A complete list of appendixes and supplements is included in the front of this report.

Water balance studies were made for twelve budget areas within the Beaver River Basin. These studies were made to simulate what actually happened during past years to provide a base for evaluating improvement measures. The water balance approach was used so that the accuracy of all the input data could be evaluated.

The water budget (balance) equation is supply minus consumptive use equals outflow plus or minus changes in ground-water storage. Water budget boundaries are shown on the map following page 151. These boundaries include the area irrigated from each main source of supply and also include pump well areas surrounding surface irrigated lands. A separate budget was prepared for each year of the study to show annual fluctuations of budget items.

Lack of long-term records for some of the basic input data indicated a ten year base period was most logical, and calendar years 1956 through 1965 were chosen. Eight years of study, 1958 through 1965, were used in the Escalante Desert subbasin (2B2) because of lack of records before 1958.

Actual computations of consumptive use and water balance were made using an automatic data processing program. The "Water Budget" ADP program analysis used in developing this supplement should not be confused or interchanged with the "Irrigation" ADP program used in Appendix V to analyze the effect of irrigation improvements through changes in irrigation efficiencies.

The "Irrigation" program distributes available water to satisfy cropland consumptive use needs. A basic assumption employed by this program is for crop production to continue so long as water is available but cease when irrigation water, soil moisture storage, or precipitation becomes insufficient. Water applied after the cutoff date could be used for perennial crop maintenance or to fill the soil profile or both, but could not generate crop production during the current year. The "Irrigation" program ADP printout illustrates water supply, consumptive use requirements, actual crop consumptive use, and water deficits. However, these values vary from similar values obtained with the "Water Budget" program due to factors already discussed and other basic differences in methodology, assumptions, and procedures.

BASIC DATA

The following discussion describes general procedures used in expanding and adjusting available data to fit the physical location and time frame covered by the budgets.

CLIMATE

Climatic data are summarized in Appendix I, "Natural Resource Inventory, Beaver River Basin". National Weather Service records were adjusted to fit water budget areas.

Precipitation

Water budget precipitation values were determined by adjusting specific monthly precipitation values for a station representing precipitation of the budget area. The adjustment factor was determined by weighing the acreage of irrigated land between isohyets on the National Weather Service, 1931-1960, Normal Annual Precipitation Map. This weighted value was compared to the 1931-1960 normal annual precipitation for the representative station and an adjustment factor was calculated (Table 1).

Records for Cedar City Airport and Enterprise-Beryl Junction did not cover the entire budget period. These records were completed by correlation with Cedar City Power House and Enterprise stations.

Table 1.--Precipitation adjustment factors for water budget areas and location of station adjusted, Beaver River Basin

Water budget area		Adjustment factor	Station adjusted
2A-24	Fillmore	0.84	Fillmore
2A-25a	Meadow	0.93	Kanosh
2A-25b	Kanosh	0.93	Kanosh
2B-1	Beaver-Greenville	0.96	Beaver
2B-2	Manderfield	0.93	Beaver
2B-3,4,6	Minersville-Milford	0.99	Minersville
2B1-1c,2,4	Cedar	0.99	Cedar City Airport
2B1-1a,3a	Summit	0.01	Parowan
2B1-1b,3b,3c	Parowan	0.93	Parowan
2B2-1	Newcastle	0.96	Enterprise
2B2-2	Enterprise	1.00	Enterprise-Beryl Jct.
2B2-3	Junction	1.00	Enterprise-Beryl Jct.

Temperature

Average monthly and annual temperature summaries were prepared for the period 1956-1965 for stations in or near the water budget areas. These values were projected into water budget areas using lapse rates between surrounding stations and station averages as applicable. If more distant stations were used, a general lapse rate of 3° F. per 1,000 feet change in elevation and 1½° F. for each degree of latitude was used. Adjusted monthly water budget temperature was then plotted against the 1956-1965 station average and the resulting slope of the best-fit line was used as the adjustment factor (Table 2).

Evaporation

Station average monthly water surface evaporation values for 1931-1960 were taken from maps in Appendix I, "Climate, Sevier River Basin, Utah".

Table 2.--Temperature adjustment factors for water budget areas and location of station adjusted, Beaver River Basin

Water budget area		Adjustment factor	Station adjusted
2A-24	Fillmore	1.0	Fillmore
2A-25a	Meadow	1.02	Fillmore
2A-25b	Kanosh	1.02	Fillmore
2B-1	Beaver-Greenville	1.04	Beaver
2B-2	Manderfield	1.0	Beaver
2B-3,4,6	Minersville-Milford	0.99	Milford A.P.
2B1-1c,2,4	Cedar	1.0	Cedar City Airport
2B1-1a,3a	Summit	1.0	Parowan
2B1-1b,3b,3c	Parowan	1.0	Parowan
2B2-1	Newcastle	1.0	Enterprise-Beryl Jct.
2B2-2	Enterprise	1.0	Enterprise-Beryl Jct.
2B2-3	Junction	1.0	Lund

The only station within the Basin maintaining pan evaporation records is Milford A.P. This station was used as the basis to determine monthly evaporation values for all stations.

The 1931-1960 average pan evaporation at Milford for the months of April through October were divided by the monthly 1956-1965 average pan evaporation to determine the factor for adjusting the 1931-1960

monthly map value for a station close to the water budget area. Evaporation map values from Appendix I, Sevier River Basin, were used for months of November through March since pan evaporation records at Milford were not maintained for this period.

Monthly station map values were plotted against map values for the water budget area and the slope of the best-fit line was taken as the adjustment factor (Table 3).

Table 3.--Evaporation adjustment factors and location of station adjusted, Beaver River Basin

Water budget area		Adjustment factor	Station adjusted
2A-24	Fillmore	1.05	Fillmore
2A-25a	Meadow	1.04	Fillmore
2A-25b	Kanosh	1.0	Fillmore
2B-1	Beaver-Greenville	1.01	Beaver
2B-2	Manderfield	1.05	Beaver
2B-3,4,6	Minersville-Milford	0.98	Milford A.P
2B1-1c,2,4	Cedar	1.0	Cedar City Airport
2B1-1a,3a	Summit	1.0	Parowan
2B1-1b,3b,3c	Parowan	1.0	Parowan
2B2-1	Newcastle	0.97	Enterprise
2B2-2	Enterprise	0.98	Enterprise
2B2-3	Junction	0.98	Enterprise

SURFACE WATER

Lack of long-term records made it difficult to accurately determine surface flows for most watersheds. Accepted hydrologic procedures were used to extend available gaged records to cover the period of the water budget and watersheds having no gaged records. Random current meter measurements of ungaged streams were used to indicate the magnitude of flow.

Gaged diversion records were obtained from river commissioner reports where available. In other localities, ungaged diversions were estimated by field observations and judgment.

Reservoir operations data were not available for most reservoirs. Available records and personal observations were used to estimate average budgets where complete data were not available.

GROUND WATER

Ground-water flows and depletions were estimated using published U.S. Geological Survey records and personal observations. Average annual flows were equally distributed by months and used where detailed records were not available to determine ground water movement. Other details of ground and surface water quantities are in Appendix I, Beaver River Basin.

LAND USE

Land use acreages used in this analysis (Table 4) were taken from Appendix II, "Water Related Land Use Inventory Supplement, Beaver River Basin".

Land use was generally determined for these categories: irrigated cropland, nonirrigated cropland, and miscellaneous. Irrigated acreage for each crop was summed and used as one value. No distinction was made between irrigated rotated crops and irrigated nonrotated crops. Irrigated cropland which was temporarily idle during the mapping period was combined with other idle land for consumptive use calculations.

Pasture lands and alfalfa in Beaver-Greenville (2B-1) water budget area were further designated according to depth to water table as follows:

Designation	Depth to water table (feet)
W1	3-5
W2	1-3
W3	0-1

All types of native vegetation with a water table below five feet were considered to have consumptive use equal to precipitation and were listed together. Nonirrigated cropland was listed as native vegetation. Phreatophytes (water table at five feet or above) were mapped as native vegetation, but were separated from native vegetation for consumptive use calculations. One third to one half the area classified as other rural lands, towns, roads, and railroads was considered to be irrigated and was listed as suburban cropland. The remaining area was combined with bare ground, dry lake beds, and lava areas and assumed to have consumptive use equal to precipitation. Water surface areas were combined regardless of location in the water budget area.

Table 4.--Land use for water budget analysis, Beaver River Basin^j

Crop or Use	WATER BUDGET AREA																
	Fillmore Subbasin (2A)				Beaver-Milford Subbasin (2B)				Cedar-Parowan Subbasin (2B1)				Escalante Desert Subbasin (2B2)				
	2A-24	2A-25a	2A-25b	Sub- Total	2B-1	2B-2	2B-3 2B-4 2B-6	Sub- total	2B1-1c 2B1-2 2B1-2g 2B1-3a 2B1-3b 2B1-3c	Sub- total	2B2-1	2B2-2	2B2-3	Sub- total	Basin Total ^h		
Irrigated Land																	
Alfalfa	8,658	2,328	5,176	16,162	4,712 ^a	928	9,509	15,149	7,069	545	5,352	12,966	1,791	1,155	8,035	10,981	55,258
Alfalfa (W2)	0	0	0	0	800	0	0	0	0	0	0	0	0	0	0	0	800
Small Grain	4,113	804	1,577	6,494	616	190	2,565	3,371	2,038	401	1,886	4,325	772	1,548	4,788	7,108	21,298
Corn	341	60	197	598	94	0	744	838	737	37	274	1,048	818	93	275	1,186	3,670
Sugar Beets	0	0	0	0	0	0	0	0	0	0	0	0	128	7	47	182	182
Potatoes	102	0	0	102	0	0	671	671	5	0	31	36	350	1,949	2,903	5,202	6,011
Orchards	4	0	0	4	19	0	0	19	0	0	0	0	0	0	7	7	30
Hayland	825	27	43	895	702	0	91	793	149	0	121	270	296	81	41	418	2,376
Pasture (W1)	253	1,138	191	1,582	0	233	296	529	1,036	162	561	1,759	138	0	15	153	4,023
Pasture (W2)	0	0	0	0	379	0	0	379	0	0	0	0	0	0	0	0	379
Pasture (W3)	0	0	0	0	1,238	0	0	1,238	0	0	0	0	0	0	0	0	1,238
Suburban Crops	768	192	268	1,228	2,476	0	0	2,476	0	0	0	0	0	0	0	0	2,476
Subtotal	15,064	4,549	7,452	27,065	11,711	1,391	14,576	27,678	12,449	1,225	8,625	22,299	4,493	5,133	16,311	25,937	102,979
Wetland																	
Meadow grass (W1)	0	0	0	0	0	0	0	0	0	0	60	60	0	0	0	0	60
Meadow grass (W2)	0	141	0	141	0	0	0	0	404	0	212	616	0	0	0	0	757
Meadow grass (W3)	0	34	0	34	0	0	0	0	0	0	45	45	0	0	0	0	79
Saltgrass (W1)	0	0	0	0	0	0	0	0	848	0	392	1,240	0	0	0	0	1,240
Saltgrass (W2)	121	392	196	709	0	0	702	702	2,146	0	1,217	3,363	67	0	0	67	4,841
Sagebrush & Rabbitbrush (W1)	0	0	0	0	0	55	0	55	746	0	1,751	2,497	356	114	428	898	3,450
Sagebrush & Rabbitbrush (W2)	0	0	0	0	253	0	152	405	400	0	250	650	0	0	0	0	1,055
Sagebrush & Rabbitbrush (W3)	0	0	0	0	661	0	0	661	0	0	0	0	0	0	0	0	661
Willows & Cottonwood (W2)	57	0	0	57	878	108	0	986	62	0	0	62	4	0	8	12	1,117
Greasewood (W1)	0	176	0	176	0	0	0	0	392	0	1,145	1,537	491	42	586	1,119	2,832
Greasewood (W2)	0	13	0	13	0	0	0	0	0	0	500	500	0	0	0	0	513
Pickleweed (W2)	0	0	0	0	0	0	1,191	1,191	0	0	0	0	0	0	0	0	1,191
Subtotal	178	756	196	1,130	1,792	163	2,045	4,000	4,998	0	5,572	10,570	918	156	1,022	2,096	17,796
Miscellaneous																	
Idle land	8,545	969	3,653	13,167	2,480 ^b	1,156	6,300	9,936	8,571	3,514	9,019	21,104	2,670	1,211	6,909	10,790	54,997
Native Vegetation	26,941	16,852	22,026	65,819	23,496	9,018	23,771	56,407	41,060	7,599	31,358	80,017	22,897	8,779	28,858	60,534	262,777
Town & Community	6,728	2,608	5,806	15,142	855	132	2,089	3,076	4,900	161	5,891	10,952	918	471	1,090	2,479	31,649
Water Surface	59	54	24	137	160 ^c	12	37 ^d	87	173	13	102	288	38	39	151	228	740
Subtotal	42,273	20,483	31,509	94,265	26,991	10,318	32,197	69,506	54,704	11,287	46,370	112,361	26,523	10,500	37,008	74,031	350,163
Total	57,515	25,788	39,157	122,460	40,494 ^c	11,872	48,818 ^d	101,184	72,151	12,512	60,567	145,230	31,934	15,789	54,341	102,064	470,938

^aIncludes 173 acres which is located in water budget area 2B-2 but receives water from 2B-1.

^bIncludes 78 acres which is located in water budget area 2B-2 but receives water from 2B-1.

^cDoes not include 851 acres of Minersville Reservoir.

^dDoes not include 247 acres of Minersville Reservoir.

^eValue is 1/2 to 1/3 of town and community acreage listed in land use inventory.

^fDoes not include water budget area 2B-5.

^gIncludes water budget area 2B-5.

^hDoes not include Sevier Lake (2) Sub-basin.

^jMapping done in 1966.

To simulate actual conditions, 251 acres of irrigated land in Manderfield water budget area (2B-2) were placed in Beaver-Greenville water budget area (2B-1). This area receives its water supply from North Creek in 2B-1. Minersville Reservoir was removed from all of the water budget areas and a separate budget prepared (Table 64).

MUNICIPAL AND INDUSTRIAL USE

The 1960 census was used as the base for population to compute municipal water use. "Use of Water for Municipal and Industrial Purposes, Utah Counties, 1960-1961," by O.L. Harline and others, was used as the source of water quantities diverted.

An estimate of per capita consumptive use was taken from Appendix IV, "Water Budget Analysis, Sevier River Basin". The average annual per capita consumptive use of 0.23 acre-feet used in the Sevier study was compared to municipal diversions at Cedar City. The average annual consumptive use shown in the Sevier River study was 60 percent of Cedar City's diversions. The factor of 0.6 was used to adjust Harline's diversions for the remainder of Beaver River Basin.

POTENTIAL CONSUMPTIVE USE

Potential consumptive use (PCU) is the potential evaporation and transpiration for a unit of irrigated cropland during the crop growing season and for the bare ground or dormant crops during the non-growing season, assuming sufficient water is available for consumptive use. The more important factors determining PCU are temperature, daylight hours, humidity, growth stage, and plant condition.

A modified version of the Blaney-Criddle Formula was used to compute consumptive use requirements because of its adaptability to local conditions and simplicity of use. The Blaney-Criddle Formula is $U = KF$, where consumptive use (U) for any period is equal to a consumptive use factor (F) times a consumptive use coefficient (K). This formula was modified to compute monthly consumptive use values by using $k = k_c \cdot k_t$, where k_c was the crop growth stage coefficient. Plotted values for most common crops are shown in Technical Release No. 21, "Irrigation Water Requirements".¹

¹Irrigation Water Requirements, Technical Release No. 21, United States Department of Agriculture, Soil Conservation Service, Engineering Division, 1967.

Figures 1 through 3 show growth stage coefficient curves for phreatophytes found in the Beaver River Basin. Curves for salt grass and greasewood (sage and rabbit brush are classified the same as greasewood) were developed for various water table depth classifications.

A crop growth stage coefficient of 0.25 was used for computing consumptive use for the nongrowing season period of annual crops. This value was raised to 0.40 for perennial crops during the nongrowing season. Growth stage coefficients for phreatophytes were tabulated using the curve value, or the nongrowing season coefficient of 0.25, whichever was larger.

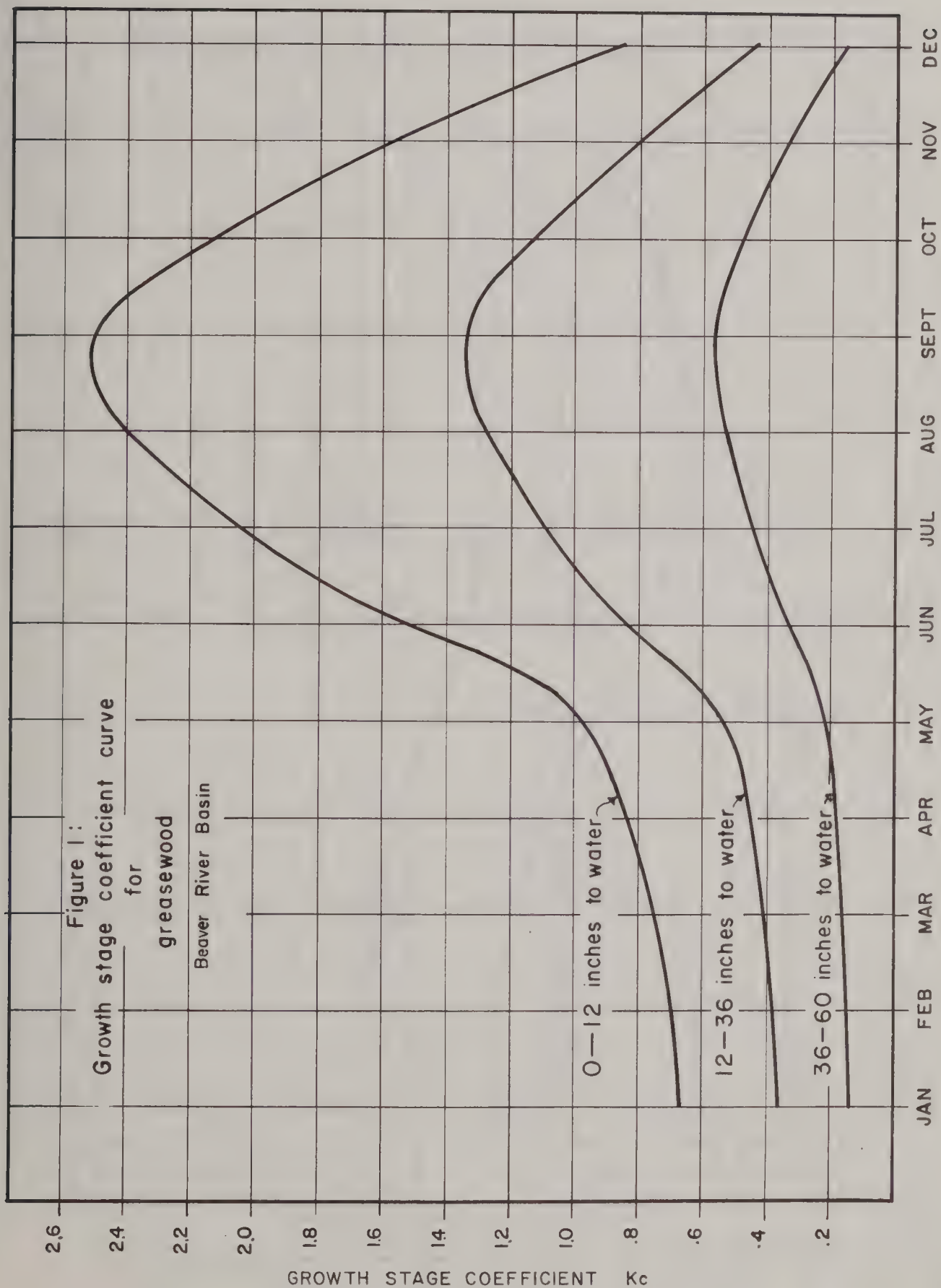
Temperature coefficients were computed by the equation $k_t = 0.0173t - 0.314$ where t is mean monthly air temperature.

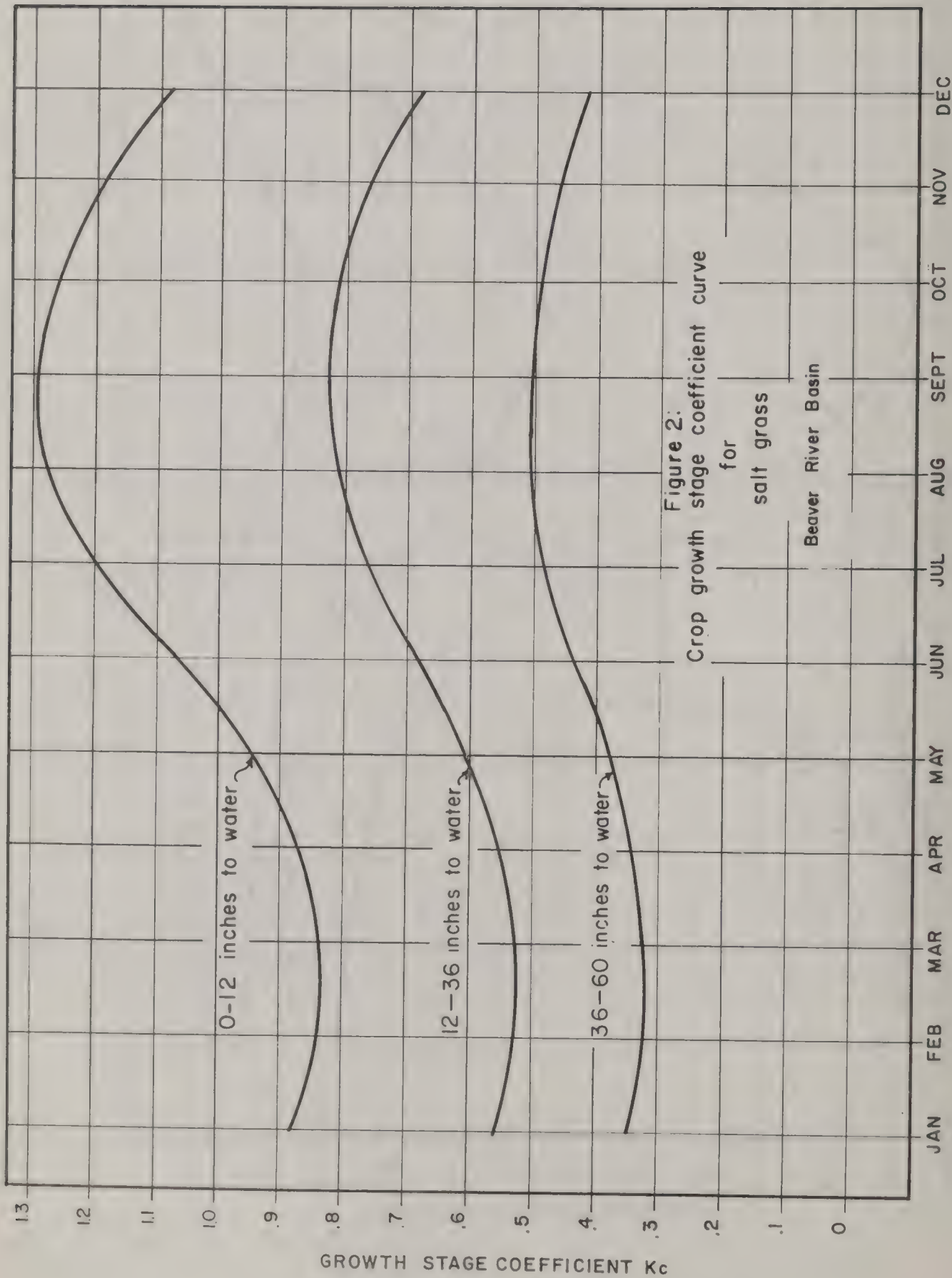
A more detailed discussion of consumptive use calculations is contained in Technical Release No. 21.

Length of growing season is a factor of climate and type of vegetation (Table 5). The growing season was calculated for each irrigated crop and watershed by plotting the average monthly temperatures for the watershed at the 15th of each month and connecting the plots with a smooth curve. Temperatures limiting growth were marked on the curve, locating dates of the beginning and end of the growing season. A further discussion of growing seasons and a list of growing seasons by watersheds is contained in the climate portion of Appendix I, Beaver River Basin.

TABLE 5.--Growing season limits, Beaver River Basin

Crop	Spring	Fall	Maximum length of growing season
Alfalfa	50° mean temp.	28° frost	-
Pasture and meadow	45° mean temp.	45° mean temp.	-
Orchards	50° mean temp.	45° mean temp.	-
Corn	55° mean temp.	32° frost	140 days
Spring grain	45° mean temp.	32° frost	130 days
Potatoes	60° mean temp.	32° frost	130 days
Sugar beets	28° frost	28° frost	180 days





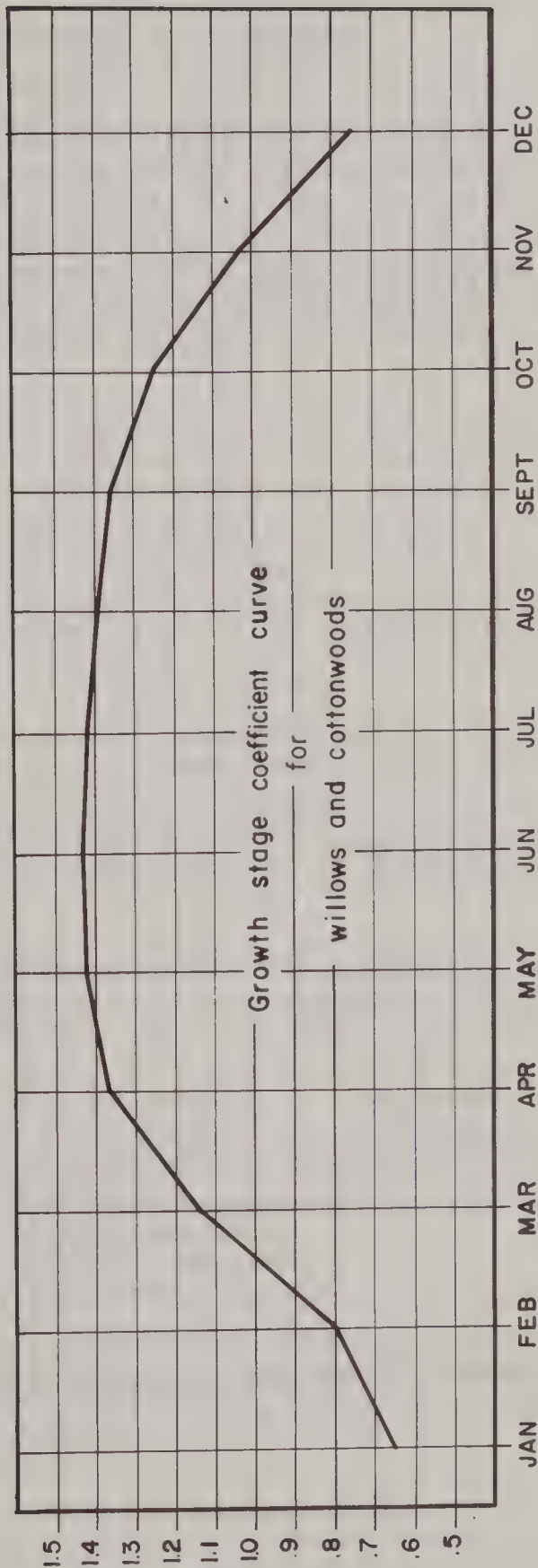
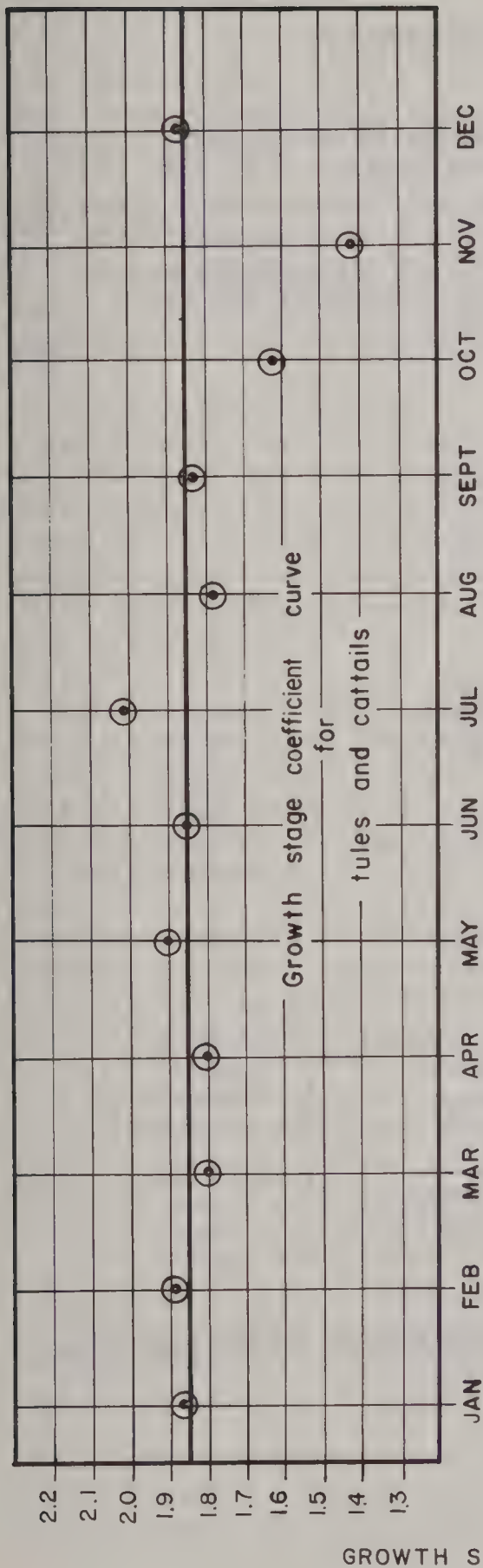


Figure 3:
Growth stage coefficient curve
for tules, cattails, willows and cottonwoods
Beaver River Basin

PROCEDURES FOR DEVELOPING WATER BUDGETS

The Beaver River Basin was analyzed using 12 water budget areas. Divisions were made along watershed boundaries where possible, but watersheds were split in the Cedar-Parowan and Meadow-Kanosh areas to coincide with water supplies (as shown on map following page 151). Explanations of water budget analysis deal with input items and actual workings of the budget. A schematic diagram of the water budget procedure is shown in Figure 4.

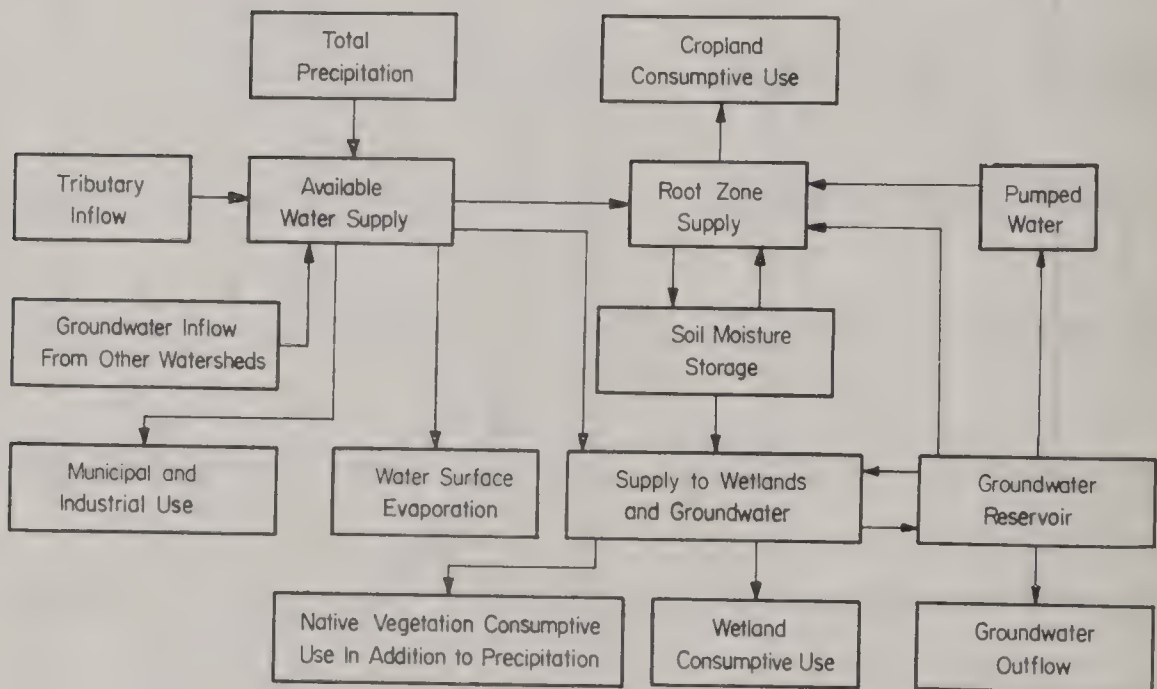


Figure 4. Schematic diagram of water budget analysis, Beaver River Basin

WATER BUDGET INPUT DATA

Inputs to the water budget are divided into supply, storage, use and outflow. The following paragraphs discuss the assumptions and judgments made compiling data for use in the water budget digital computer program.

Water Supply

Total inflow into a water budget area includes inflow from other budget areas and surface and/or ground-water inflow from upper watershed or water yielding areas.

The only areas receiving surface inflow from other water budget areas were Minersville-Milford (2B-3,4,6) and Fillmore (2A-24). Ground-water flow between watersheds was estimated from slopes of ground water gradients, transmissibility of alluvium, and areas of flow. Ground-water inflow was held constant for each year of the water budget period. Inflow from Watershed F-5, Sevier River, enters Coal Creek watershed as ground-water flow and is gaged as surface flow in Coal Creek.

Inflow from upper watersheds or water yielding areas are referred to as tributary inflow. Subsurface inflows were estimated as outlined above. Annual surface inflows were taken from available records or determined by correlation with nearby gaged streams. Total tributary inflow was taken as the sum of measured or correlated surface and subsurface flows.

Tributary inflow data were not available for the Escalante Desert subbasin. Total tributary inflow for Newcastle (2B2-1) was taken as the sum of all diversions within the watershed, including releases from Newcastle Reservoir.

Tributary inflow for Enterprise (2B2-2) was taken as releases from Enterprise Reservoir plus estimated yield from upper watershed areas distributed by annual and monthly runoff patterns by correlation with Coal Creek during the 1958-1965 period.

The volume of flow to Junction (2B2-3) was estimated by first determining amounts needed to balance the water budget on the basis of known depletion rates, then adding this amount as tributary inflow. Monthly distribution was made by correlation on the basis of average tributary inflow to Cedar-Parowan subbasin(2B1).

The analysis described above ignored the influence of local runoff consumed by native vegetation in Enterprise and Junction water budget areas. This consumption was probably negligible in Enterprise

water budget area, but has been estimated to be as much as 13,000 acre-feet in Junction water budget area.^{1/} Evaporation from Enterprise and Newcastle reservoirs was also ignored.

Yield maps prepared by the Forest Service were used to determine total watershed tributary inflow by correlation with individual drainages having measured inflow. Relationships between total yield from yield maps and tributary inflow used in the budgets are shown in Appendix I, Beaver River Basin.

Adjustments in tributary inflow were necessary after the first trial budget. Tributary inflow was adjusted by judgment and knowledge of the area. In no case was tributary inflow reduced to less than the sum of measured or correlated streamflow and ground-water inflow.

Precipitation was taken from available records and projected into water budget areas as described in a preceding section. Rainfall was assumed to be 100 percent effective no matter what time of year it fell or the existing soil moisture condition. Equations developed to reduce gross precipitation to effective precipitation were not used for this analysis.

Storage

Storage was broken into three groups in the water budgets: surface, soil moisture, and ground water.

The effect of storage in Minersville Reservoir was the only surface storage completely evaluated during the budget analysis (Table 64). Newcastle and Enterprise Reservoirs were not analyzed because of lack of data on inflow and reservoir level fluctuations.

Maximum soil moisture storage capacity was computed for all irrigated cropland (excluding idle irrigated areas). A weighted capacity was computed for the watershed on the basis of estimated areas with different soil moisture capacity.

Land use acreage and corresponding root-zone depth for each crop were multiplied by moisture holding capacity to arrive at the total soil moisture storage capacity. This value was reduced by fifty percent to represent total readily available moisture.

The soil moisture in storage at the end of each year was a carry-over factor from one year to the next. Using the multiple

^{1/} "Water Supplies and Their Uses in Iron, Washington and Kane Counties of Utah", Special Report 13. Agricultural Experiment Station, Utah State University, in cooperation with other agencies (1963).

budget approach, carry-over soil moisture storage was more accurately analyzed.

Antecedent soil moisture as carried over from December 1955 to January 1956 (the first month of the study) was determined by averaging the end of year soil moisture storage for each year of the study and then adjusting by the same ratio as 1955 precipitation divided by average precipitation. This method closely approximated the antecedent soil moisture as compared to making a budget for 1955. In the Escalante Desert subbasin, budgets were made for 1956-1965, but the 1956 and 1957 budgets were not used except to provide antecedent soil moisture for January 1958.

Total ground-water reservoir capacity has not been estimated for most of the valleys in the Beaver River Basin. Changes in ground-water levels have been measured using well levels and published in the form of contour maps. Volumes of change in storage were computed by applying an estimated storage coefficient to the change in water table.

Ground-water storage changes, computed using a storage coefficient of 0.05, were correlated satisfactorily to average additions and depletions to ground-water supply published in other studies. Long-term trends in ground-water storage were used as the balancing factor in adjusting water budgets.

Distribution and Use

Potential cropland consumptive use for each irrigated crop within the watershed was computed for each year of the 1956-1965 period. Suburban crops were classified as irrigated pasture for consumptive use purposes. This was done to account for lawns, gardens, and beautification which receive an irrigation water supply.

Actual cropland consumptive use was limited by available root-zone supply. Total diverted surface water and pumped water were tabulated by months and distributed to the root-zone by an application efficiency. Efficiencies were determined for each watershed by measurements, field estimates and judgment.

Available water, in addition to monthly crop needs, was used to fill root-zone storage with any excess percolating to ground-water supply. If water supply did not meet plant needs, root-zone storage supplemented available supply until depleted. When all soil moisture was exhausted, consumptive use deficits occurred.

Each month was evaluated separately from the preceding months (except for soil moisture storage) so crops having a root-zone deficit one month could receive water supplies in the following months, if water was available.

There is not an appreciable direct use from ground water by irrigated crops within the Basin. Beaver River Watershed contains approximately 4,000 acres of meadow which receive a partial supply from ground water. Crop growth stage coefficients for irrigated wet meadows were estimated using the higher monthly coefficient between wet meadows and irrigated meadows.

The portion of consumptive use supplied from ground water is dependent on the depth of water table below the land surface (Table 6).

TABLE 6.--Percent of consumptive use of irrigated meadow satisfied by ground water, Beaver-Greenville (2B-1) Beaver River Basin

Water table designation (mapping symbol)	Percent
W1	40
W2	70
W3	100

Consumptive use by phreatophytes was computed for each vegetative type depending on depth to water table. It was assumed that water table depths remained the same during the growing season, and the affected acres were the same from year to year. Phreatophyte consumptive use was partially supplied by precipitation and the remainder by use from ground water, return flows from irrigation, and seepage from conveyance systems.

Miscellaneous uses include native vegetation, town and community acreages (not including those listed as suburban crops), bare ground, water surface evaporation, and municipal and industrial. Consumptive use equals precipitation for these areas, except as noted below. This assumption ignores local runoff from these areas which is used in other areas by native vegetation. Municipal and industrial use for 1960-1961 was used as the "average" of the 1956-1965 period. Monthly distribution was made by judgment.

Water surface evaporation quantities in inches were determined as described in the basic data section. Monthly and yearly evaporation in acre-feet was computed by multiplying evaporation by "average water surface areas" for each watershed. Evaporation listed in water budget analysis are net values; i.e., evaporation minus precipitation for the same period.

An additional use by native vegetation in addition to precipitation was recognized in balancing water budgets. These values do not include areas classified as phreatophytes (wetlands). Consumptive use results primarily from deep-rooted vegetation using from the ground-water reservoir. Irrigation tailwater provides another source of water supply. This use has been mentioned in other reports,^{1/ 2/} but never completely defined. Values of native vegetation consumptive use were taken from these reports (values given were annual values for a specific year) and adjusted for the ten year average (Table 7). Average values for Beaver-Greenville (2B-1) were estimated from areas of native vegetation in the valley. Average uses by native vegetation were increased and decreased annually in direct proportion to tributary inflow.

TABLE 7.--Average consumptive use by native vegetation for 1956-1965, Beaver River Basin

Water budget area		Consumptive use (acre-feet) ^a
2A-24	Fillmore	8,540
2A-25a	Meadow	4,620
2A-25b	Kanosh	7,030
2B-1	Beaver-Greenville	1,480
2B-2	Manderfield	1,980
2B-3,4,6	Minersville-Milford	7,340
2B1-1c,2,4	Cedar	16,270
2B1-1a,3a	Summit	2,790
2B1-1b,3b,3c	Parowan	7,890
2B2-1	Newcastle	2,140 ^b

^aDoes not include consumptive use of precipitation.

^b1958-1965 average

Outflow

Surface water outflow was negligible with the exception of Beaver-Greenville and Manderfield water budget areas which supply Minersville Reservoir.

¹"Water Supplies and Their Uses in Iron, Washington and Kane Counties of Utah", Special Report 13. Agricultural Experiment Station, Utah State University, in cooperation with other agencies (1963).

²"Ground-Water Resources of Pavant Valley, Utah", Water Supply Paper 1794. United States Geological Survey in cooperation with Utah State Engineer (1965).

Ground-water outflow was estimated as described in preceding sections. Average values were used for each year of the study even though outflow from Pavant Valley, as reflected in the flow of Clear Lake Springs, showed a general decrease of 15-20 percent during the study period.^{1/} Ground-water gradients are moderately flat and do not readily respond to local changes in ground-water levels. Average annual values of ground-water movement are shown on the map following page 18.

WATER BUDGET COMPILATION

The following discussions deals with the mathematical composition of water budgets and is presented in an attempt to clarify procedures. The compilation of water budgets are described at two levels.

The first discussion is general in nature for any budget. The second deals specifically with one year for one watershed. The discussion deals with each line item of an individual budget (Table 8) and each line is numbered and referenced in the text by numbers in parentheses.

Available water resources for a water budget area are composed of ground and surface water intrawatershed flow, ground and surface water tributary inflow (1,2), and precipitation on the water budget area (7, 19, 21).

Total root-zone supply (9) is the sum of surface (3) and well diversions (5) applied to cropland at a weighted efficiency (4, 6), precipitation (7), and direct use from ground water (8).

Potential cropland consumptive use (10) is the sum of the individual consumptive uses. A positive value of supply minus consumptive use (11) indicates a surplus of root-zone supply and a minus value indicates there is a supply deficit.

Cumulative soil moisture (12) is the algebraic sum of previous months soil moisture plus supply, minus use for the current month. Values less than zero are listed as zero. A positive figure indicates root-zone moisture is available for future consumptive use. A value of zero cumulative soil moisture means carry-over storage from the previous month plus total root-zone supply for the current month is not adequate to meet current month's demands. The minus values of

1

"Causes of Fluctuations in the Rate of Discharge of Clear Lake Springs, Millard County, Utah", Water Supply Paper 1839-E. United States Geologic Survey in cooperation with Utah Department of Fish and Game and the Utah State Engineer (1967).

TABLE 8.--Annual water budget, Manderfield (2B-2), Beaver River Basin

	CALENDAR YEAR 1961												Annual
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	
	Acre-Feet												
Ground water tributary inflow (1)	108.	108.	108.	107.	107.	107.	107.	107.	107.	108.	108.	108.	1290.
Surface tributary inflow (2)	88.	86.	122.	263.	582.	336.	129.	139.	148.	127.	110.	112.	2242.
Diversions to cropland (3)	75.	73.	104.	224.	495.	286.	110.	118.	126.	108.	93.	95.	1906.
26 percent to root-zone (4)	19.	19.	27.	58.	129.	74.	29.	31.	33.	28.	24.	25.	495.
Pumped irrigation water (5)	0.	0.	0.	0.	120.	396.	550.	430.	224.	0.	0.	0.	1720.
32 percent to root-zone (6)	0.	0.	0.	0.	38.	127.	176.	138.	72.	0.	0.	0.	550.
Precipitation on cropland (7)	85.	0.	153.	177.	125.	0.	147.	280.	207.	16.	60.	40.	1290.
Direct use ground water (8)	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply (9)	105.	19.	180.	235.	292.	201.	351.	449.	311.	44.	85.	65.	2336.
Potential consumptive use on irrigated croplands (10)	26.	31.	45.	78.	354.	688.	753.	602.	290.	75.	30.	26.	2997.
Supply minus use (11)	79.	-12.	135.	157.	-61.	-487.	-402.	-154.	21.	-31.	55.	39.	-660.
Cumulative soil moisture (maximum capacity-440 a.f.) (12)	304.	293.	428.	440.	379.	0.	0.	0.	0.	0.	55.	94.	
Consumptive use deficit (13)	0.	0.	0.	0.	0.	-109.	-402.	-154.	0.	-9.	0.	0.	-673.
Actual consumptive use (14)	26.	31.	45.	78.	354.	579.	351.	449.	290.	66.	30.	26.	2323.
Addition to ground water (15)	0.	0.	0.	145.	0.	0.	0.	0.	0.	0.	0.	0.	145.
Net water surface evaporation (16)	0.	1.	1.	3.	6.	8.	9.	4.	4.	4.	3.	1.	44.
M and I consumptive use (17)	1.	1.	2.	2.	2.	3.	4.	4.	3.	2.	2.	1.	27.
Supply to wetland and ground water (18)	175.	173.	200.	452.	514.	231.	19.	70.	144.	201.	189.	194.	2560.
Precipitation on wetland (19)	10.	0.	18.	21.	15.	0.	17.	33.	24.	2.	7.	5.	151.
Wetland consumptive use (20)	4.	6.	12.	24.	45.	78.	92.	83.	44.	23.	6.	4.	422.
Precipitation and consumptive use on idle land, native vegetation and town and community areas (21)													9559.
Consumptive use by native vegetation in addition to precipitation (22)	12.	12.	24.	48.	96.	168.	252.	252.	168.	96.	24.	24.	1176.
Outflow plus ground water storage change (23)	169.	155.	182.	400.	387.	-15.	-308.	-233.	-44.	84.	166.	170.	1113.
Surface and ground water outflow to Minersville Reservoir (24)	72.	67.	80.	18.	26.	48.	39.	25.	34.	33.	95.	72.	609.
Change in ground water storage (25)	97.	88.	102.	382.	361.	-63.	-347.	-258.	-78.	51.	71.	98.	504.

cumulative soil moisture are listed as consumptive use deficits (13). Potential consumptive use on irrigated cropland minus consumptive use deficits (absolute value) gives actual consumptive use on irrigated cropland (14).

The volume of cumulative soil moisture is limited by water holding capacity of the soil. When additions to cumulative soil moisture exceed this limit, the excess water is listed as an addition to ground water (15).

Net water surface evaporation (16) equals monthly evaporation minus precipitation during that month. Municipal and industrial consumptive use (17) is estimated on the basis of population.

Supply to wetlands and ground water (18) equals the total available water supply (1, 2, 7) minus actual irrigated cropland consumptive use (14), net water surface evaporation (16), and municipal and industrial use (17) as adjusted by changes in soil moisture storage. A decrease in cumulative soil moisture (12) from one time period to another is equivalent to an increase in the available water supply, whereas an increase in cumulative soil moisture is equivalent to an increase in total watershed consumptive use.

Addition of precipitation on wetlands (19) increases supply to wetlands. The same monthly and annual precipitation is used on wetlands as used on the adjacent croplands.

Outflow plus change in ground-water storage (23), equals supply to wetlands and ground water (18) plus precipitation on wetlands (19) less native vegetation and wetland consumptive use (22, 20).

Outflow is composed of both surface and ground water (24) flow. Change in ground-water storage (25) is used to balance the budget for each month.

A line item for precipitation on and consumptive use by native vegetation, bare ground, and town and community acreages (21) is included in the budget to account for all acreages in the budget area.

Most input data such as surface and ground-water inflow are available with an accuracy of plus or minus ten percent, but data for some water budgets were questionable at this accuracy. The budgets represent field conditions within the accuracy of the input data. Water budget values are shown to the nearest whole number so the budgets would be internally consistent. Rounding errors do occur in computer computations so individual lines may not add exactly.

The water budget analysis procedure is further explained using the 1961 water budget for Manderfield (Table 8).

There was no flow into Manderfield water budget area from other budget areas. Surface inflow (2) from the upper watershed was estimated by correlation with the gaged Beaver River flow. Correlation was made by plotting annual Beaver River flow against the annual flow of Indian Creek for the period of record available. The best-fit line through the plotted points had a slope of 0.12, which was used as the correlating factor. Monthly correlations were much more erratic, but tended to parallel the annual correlation factor. The monthly correlation value for each month was set at 0.12. Correlated annual surface flow for 1961 was 2,242 acre-feet.

Average annual ground water inflow (1) from the upper watershed was estimated at 1,290 acre-feet. The average value was used for each year of the study because more exact data were not available. An even monthly distribution of flow was assumed.

Diversions to cropland (3) were estimated at 85 percent of surface water inflow to account for loss of water past diversion and infiltration in the streambed above the diversions. This approach generally results in an overestimation of diversions during the winter months and an underestimation during summer months.

Well diversion volumes (5) were taken from a report by the Geological Survey for the Beaver Valley, which included Indian Creek. Total discharge for 1961 was 4,300 acre-feet with an estimated 40 percent or 1,720 acre-feet diverted in Manderfield water budget area. Monthly distribution was estimated according to the portion of annual consumptive use occurring in that month with adjustment for the months of April to October. The same monthly distribution was used for each year.

Irrigation efficiencies include conveyance and on-farm efficiencies as shown in Appendix II, Beaver River Basin. These values were estimated using field measurements and judgment. Conveyance systems for wells are usually short and have a higher efficiency than those for surface water diversions.

The following tabulation shows irrigation efficiencies used for Manderfield Water budget area:

Surface water diversions	Efficiency (percent)
Conveyance	65
On-farm	40
Overall	26
Well water diversions	
Conveyance	80
On-farm	40
Overall	32

Root-zone supply from surface (4) and well water (6) was the diverted amount multiplied by the irrigation efficiency. For example, surface water diversions for May were 495 acre-feet at 26 percent efficiency or 129 acre-feet delivered to the root-zone. Pumped irrigation water for May was 120 acre-feet at 32 percent efficiency or 38 acre-feet delivered to the root-zone.

Precipitation on cropland (7) was taken from the station records at Beaver and adjusted by a factor of 0.93 to represent the budget area. Direct use of ground water (8) by irrigated crops was negligible.

Total root-zone supply (9) was the sum of surface and well diversions delivered to the root-zone and precipitation on croplands. For May, this was the sum of 129 acre-feet from surface diversions, 38 acre-feet from well diversions, and 125 acre-feet from precipitation for a total of 292 acre-feet.

Potential cropland consumptive use (10) on the 1,391 acres of cropland was computed for 1961 temperature conditions and equaled 2,997 acre-feet for the year. Potential consumptive use was 354 acre-feet for May. Total root-zone supply of 292 acre-feet, minus potential cropland consumptive use of 354 acre-feet equals -61 acre-feet. For May, cropland consumptive use exceeded available supply.

During April potential consumptive use was 78 acre-feet with a total root-zone supply from irrigation and precipitation of 235 acre-feet. Potential consumptive use was less than root-zone supply by 157 acre-feet.

Cumulative soil moisture (12) carried over to March was 293 acre-feet. Supply minus use for March was 135 acre-feet with the total being used to increase the soil moisture storage.

Carry-over cumulative soil moisture to April was 428 acre-feet (293 acre-feet plus 135 acre-feet). The surplus of supply minus use (11) for April of 157 acre-feet exceeded maximum soil storage of 440 acre-feet and an addition to ground water of 145 acre-feet occurred.

During June, supply minus use was -487 acre-feet, indicating there was less supply than potential consumptive use. The cumulative soil moisture carry-over from May of 379 acre-feet was used to satisfy potential consumptive use. Potential consumptive use was not met and a consumptive use deficit (13) of 109 acre-feet occurred. Another way of expressing consumptive use deficit is supply minus use (-487 acre-feet, plus cumulative soil moisture from the previous month of 379 acre-feet equals a consumptive use deficit of 109 acre-feet).

Actual consumptive use (14) for the months of January through May was equal to potential consumptive use because supply to the root-zone, including cumulative soil moisture, was adequate to meet potential use. During the months of June through August the root-zone supply plus cumulative soil moisture was not adequate to meet potential consumptive use, and actual consumptive use was less than potential consumptive use. Mathematically for June, potential consumptive use of 688 acre-feet minus consumptive use deficits of 109 acre-feet gave an actual consumptive use of 579 acre-feet.

Net water surface evaporation (16) was calculated on the basis of 12 acres of water surface within the watershed. Net evaporation was equal to water surface evaporation minus precipitation. Water surface evaporation was taken from monthly tabulated values prepared for Beaver City and adjusted to Manderfield water budget area by a factor of 1.05.

Municipal and industrial consumptive use (17) was estimated to be 60 percent of the per capita diversion of 123,300 gallons. Total annual use for municipal and industrial purposes was estimated to be 27 acre-feet.

Supply to wetlands and ground water (18) was equal to total supply minus use. Using June for example, total supply was equal to ground-water inflow of 107 acre-feet plus surface inflow of 336 acre-feet and zero precipitation--or 443 acre-feet. Total use was composed of actual consumptive use of 579 acre-feet plus net water surface evaporation of eight acre-feet plus municipal and industrial use of three acre-feet--or 590 acre-feet. Cumulative soil moisture was decreased by 379 acre-feet during the month of June, or supply was increased from 443 acre-feet to 822 acre-feet. Supply to wetlands and ground water was equal to supply of 822 acre-feet minus 590 acre-feet, or 232 acre-feet.

During November, supply was 278 acre-feet and use was 35 acre-feet. Cumulative soil moisture increased from zero to 55 acre-feet and when added to consumptive use gave a total use of 90 acre-feet. Supply to wetlands was equal to supply of 278 acre-feet minus use of 90 acre-feet, or a total of 188 acre-feet.

Supply to wetlands and ground water was increased by precipitation (19) as previously discussed, and decreased by consumptive use on wetlands (20). Negative value of supply to wetlands and ground water did not affect wetland consumptive use since the level of the water table was assumed to remain constant.

Average consumptive use by native vegetation in addition to precipitation (22) was adjusted by the ratio of 1961 tributary inflow to 1956-1965 average tributary inflow. Average native vegetation consumptive use was computed at 1,980 acre-feet and was adjusted by approximately 60 percent to 1,176 acre-feet.

Outflow and change in ground-water storage (23) equaled supply to wetlands and ground water plus precipitation on wetlands minus consumptive use on wetlands and native vegetation. For example, during August the outflow and change in ground-water storage is the sum of supply to wetlands of 70 acre-feet, plus precipitation of 33 acre-feet, minus wetland consumptive use of 83 acre-feet, minus consumptive use by native vegetation of 252 acre-feet, amounts to -233 acre-feet.

Surface outflows (24) from Manderfield water budget area were estimated from annual water budgets prepared for Minersville Reservoir. Inflow into Minersville Reservoir, in addition to surface flow from the Beaver River, was comprised of ground-water flow from the Beaver-Greenville and Manderfield water budget areas. Monthly distributions of annual surface outflows were proportioned by percentages from the average budget for Minersville Reservoir.

Change in ground-water storage (25) fluctuated with increases and decreases of water supply. The 1956-1965 average annual increase in ground-water storage was approximately 288 acre-feet. During 1961, storage was increased by 504 acre-feet. For August, the decrease in ground-water storage was equal to an outflow and change in ground-water storage of 233 acre-feet minus a surface outflow of 25 acre-feet or 258 acre-feet.

TABLE 9.--Representative potential consumptive use (calendar year 1961), Fillmore (2A-24), Beaver River Basin

Land use	Acres	MONTHLY CONSUMPTIVE USE, Inches												Annual Use	
		Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Inches	Acre-Feet
		Irrigated Cropland													
Alfalfa	8,658	.25	.38	.54	1.42	4.44	7.43	8.79	7.16	3.52	1.72	.25	.24	36.13	26,065
Hayland	825	.25	.38	.54	1.89	3.70	6.05	7.28	6.15	3.09	1.74	.29	.24	31.59	2,172
Pasture	253	.25	.38	.54	1.89	3.70	6.05	7.28	6.15	3.09	1.74	.29	.24	31.59	666
Small grain	4,113	.15	.24	.34	1.15	4.36	7.89	5.38	1.69	.89	.55	.16	.15	22.95	7,865
Corn	341	.15	.24	.34	.56	1.85	4.34	7.76	7.30	2.77	.55	.16	.15	26.15	743
Potatoes	102	.15	.24	.34	.56	1.19	3.49	8.15	8.99	4.23	.55	.16	.15	28.18	240
Orchards	4	.25	.38	.54	.89	4.03	7.43	8.79	7.16	3.52	1.74	.25	.24	35.20	12
Suburban crops	768	.25	.38	.54	1.89	3.70	6.05	7.28	6.15	3.09	1.74	.29	.24	31.59	2,022
Total use	15,064	.19	.29	.42	1.21	3.73	6.41	6.73	4.89	2.40	1.20	.20	.18	27.85 ^a	39,785
Wetlands (Phreatophytes)															
Salt grass W2	121	.35	.50	.71	1.27	2.51	4.47	6.02	5.54	2.95	1.78	.48	.40	26.98	272
Willows W2	57	.40	.75	1.53	3.04	5.84	9.40	11.24	9.39	4.87	2.77	.64	.45	50.33	239
Total use	178	.34	.61	.94	1.82	3.57	6.07	7.68	6.81	3.57	2.09	.54	.40	34.44 ^a	511
Consumptive Use of Precipitation															
Idle land	8,545													13.16	9,370
Native vegetation	26,941													13.16	29,544
Town and community area	6,728													13.16	7,378
Water Surface Evaporation															
Net evaporation	59	.41	.61	.81	2.44	6.30	9.56	9.56	5.28	2.64	2.64	1.02	.20	41.47	204
GRAND TOTAL	57,515													18.11 ^a	86,791

^aWeighted value.

TABLE 10.--Annual water budget, Fillmore (2A-24), Beaver River Basin

	CALENDAR YEAR 1956												Annual
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	
	Acre-Feet												
Inflow from Central Utah Canal	0.	0.	0.	0.	1550.	470.	210.	0.	0.	0.	0.	0.	2230.
Ground water inflow from other watersheds	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	6000.
Tributary inflow	780.	730.	1185.	3170.	4785.	1822.	816.	601.	490.	564.	488.	543.	15974.
Diversions to cropland	702.	657.	1066.	2853.	5856.	2110.	944.	541.	441.	508.	439.	489.	16607.
30 percent to root-zone	211.	197.	320.	856.	1757.	633.	283.	162.	132.	152.	132.	147.	4982.
Pumped irrigation water	0.	0.	0.	0.	2632.	3949.	5453.	3761.	2256.	752.	0.	0.	18804.
36 percent to root-zone	0.	0.	0.	0.	948.	1422.	1963.	1354.	812.	271.	0.	0.	6769.
Precipitation on cropland	2467.	2552.	53.	2299.	685.	200.	0.	32.	179.	1371.	327.	707.	10872.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	2678.	2749.	373.	3155.	3390.	2255.	2246.	1548.	1124.	1794.	459.	853.	22623.
Potential consumptive use on irrigated cropland	411.	252.	690.	1905.	5627.	9272.	9312.	6696.	4983.	2031.	345.	277.	41801.
Supply minus use	2267.	2497.	-317.	1250.	-2237.	-7017.	-7066.	-5148.	-3859.	-237.	113.	576.	-19178.
Cumulative soil moisture (maximum capacity-5,554 a.f.)	5007.	5554.	5237.	5554.	3317.	0.	0.	0.	0.	0.	113.	689.	
Consumptive use deficit	0.	0.	0.	0.	0.	-3700.	-7066.	-5148.	-3859.	-237.	0.	0.	-20011.
Actual consumptive use	411.	252.	690.	1905.	5627.	5572.	2246.	1548.	1124.	1794.	345.	277.	21791.
Addition to ground water	0.	1951.	0.	932.	0.	0.	0.	0.	0.	0.	0.	0.	2883.
Net water surface evaporation	-6.	-4.	13.	11.	33.	51.	46.	45.	37.	16.	13.	1.	257.
M and I consumptive use	12.	15.	21.	27.	27.	30.	42.	42.	30.	21.	18.	15.	302.
Supply to wetland and ground water	1063.	2972.	1331.	3709.	4070.	656.	-809.	-502.	-21.	604.	826.	880.	14776.
Precipitation on wetland	29.	30.	1.	27.	8.	2.	0.	0.	2.	16.	4.	8.	128.
Wetland consumptive use	8.	5.	17.	30.	56.	91.	111.	96.	77.	37.	10.	7.	543.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													30356.
Consumptive use by native vegetation in addition to precipitation	61.	61.	122.	244.	488.	854.	1281.	1281.	854.	488.	122.	122.	5978.
Outflow plus ground water storage change	1023.	2936.	1193.	3462.	3535.	-286.	-2201.	-1879.	-950.	96.	699.	760.	8383.
Surface outflow	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Ground water outflow	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	12000.
Change in ground water storage	23.	1936.	193.	2462.	2535.	-1286.	-3201.	-2879.	-1950.	-904.	-301.	-240.	-3617.

TABLE 11.--Annual water budget, Fillmore (2A-24), Beaver River Basin

	CALENDAR YEAR 1957											
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
	Acre-Feet											
Inflow from Central Utah Canal	0.	0.	0.	0.	460.	10.	0.	0.	0.	0.	0.	0.
Ground water inflow from other watersheds	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.
Tributary inflow	596.	652.	970.	4870.	14234.	11914.	2635.	1409.	965.	997.	893.	834.
Diversions to cropland	536.	587.	873.	4383.	13271.	10733.	2371.	1268.	868.	897.	804.	751.
30 percent to root-zone	161.	176.	262.	1315.	3981.	3220.	711.	380.	261.	269.	241.	225.
Pumped irrigation water	0.	0.	0.	0.	2863.	4295.	5931.	4091.	2454.	818.	0.	0.
36 percent to root-zone	0.	0.	0.	0.	1031.	1546.	2136.	1473.	883.	294.	0.	0.
Precipitation on cropland	3301.	517.	2035.	4735.	2668.	833.	886.	506.	21.	960.	1223.	791.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	3461.	693.	2297.	6050.	7680.	5599.	3732.	2359.	1165.	1523.	1464.	1016.
Potential consumptive use on irrigated cropland	255.	417.	703.	1658.	4482.	8016.	9114.	7312.	4409.	1829.	321.	344.
Supply minus use	3207.	276.	1594.	4392.	3197.	-2417.	-5382.	-4953.	-3244.	-305.	1144.	672.
Cumulative soil moisture (maximum capacity-5,554 a.f.)	3896.	4172.	5554.	5554.	5554.	3137.	0.	0.	0.	0.	1144.	1816.
Consumptive use deficit	0.	0.	0.	0.	0.	0.	-2245.	-4953.	-3244.	-305.	0.	0.
Actual consumptive use	255.	417.	703.	1658.	4482.	8016.	6869.	2359.	1165.	1523.	321.	344.
Addition to ground water	0.	0.	212.	4392.	3197.	0.	0.	0.	0.	0.	0.	0.
Net water surface evaporation	-9.	4.	5.	0.	13.	33.	38.	39.	27.	13.	9.	1.
M and I consumptive use	12.	15.	21.	27.	27.	30.	42.	42.	30.	21.	18.	15.
Supply to wetland and ground water	932.	957.	1394.	8420.	13340.	7595.	209.	-25.	264.	900.	1125.	1093.
Precipitation on wetland	39.	6.	24.	56.	32.	10.	10.	6.	0.	11.	14.	9.
Wetland consumptive use	5.	9.	17.	26.	45.	79.	108.	105.	68.	33.	9.	8.
Precipitation and consumptive use on idle land, native vegetation and town and community areas												
Consumptive use by native vegetation in addition to precipitation	155.	155.	310.	620.	1240.	2170.	3255.	3255.	2170.	1240.	310.	310.
												51699.
Outflow plus ground water storage change	811.	799.	1091.	7830.	12087.	5356.	-3144.	-3380.	-1973.	-362.	820.	784.
Surface outflow	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Ground water outflow	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.
Change in ground water storage	-189.	-201.	91.	6830.	11087.	4356.	-4144.	-4380.	-2973.	-1362.	-180.	-216.
												8723.

TABLE 12.---Annual water budget, Fillmore (2A-24), Beaver River Basin

	CALENDAR YEAR 1958												
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Inflow from Central Utah Canal	0.	0.	0.	0.	660.	1330.	570.	0.	0.	0.	0.	0.	2560.
Ground water inflow from other watersheds	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	6000.
Tributary inflow	793.	1004.	1421.	4664.	14015.	3947.	1409.	1060.	795.	798.	685.	755.	31346.
Diversions to cropland	714.	904.	1279.	4198.	13273.	4882.	1838.	954.	715.	718.	616.	679.	30771.
30 percent to root-zone	214.	271.	384.	1259.	3982.	1465.	551.	286.	215.	215.	185.	204.	9231.
Pumped irrigation water	0.	0.	0.	0.	3066.	4599.	6351.	4380.	2628.	876.	0.	0.	21900.
36 percent to root-zone	0.	0.	0.	0.	1104.	1656.	2286.	1577.	946.	315.	0.	0.	7884.
Precipitation on cropland	1455.	2910.	2415.	432.	622.	0.	32.	1033.	517.	0.	1054.	274.	10745.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	1669.	3181.	2798.	1692.	5708.	3120.	2869.	2896.	1677.	531.	1239.	478.	27861.
Potential consumptive use on irrigated cropland	282.	514.	503.	1621.	6672.	8560.	8835.	7380.	4425.	2214.	414.	369.	41790.
Supply minus use	1387.	2668.	2296.	70.	-964.	-5440.	-5966.	-4484.	-2747.	-1683.	825.	109.	-13929.
Cumulative soil moisture (maximum capacity-5,554 a.f.)	3203.	5554.	5554.	5554.	4590.	0.	0.	0.	0.	0.	825.	934.	
Consumptive use deficit	0.	0.	0.	0.	0.	-850.	-5966.	-4484.	-2747.	-1683.	0.	0.	-15730.
Actual consumptive use	282.	514.	503.	1621.	6672.	7710.	2869.	2896.	1677.	531.	414.	369.	26060.
Addition to ground water	0.	317.	2296.	70.	0.	0.	0.	0.	0.	0.	0.	0.	2683.
Net water surface evaporation	-2.	-5.	4.	24.	28.	49.	58.	34.	30.	23.	10.	3.	257.
M and I consumptive use	12.	15.	21.	27.	27.	30.	42.	42.	30.	21.	18.	15.	302.
Supply to wetland and ground water	1069.	1540.	3808.	3924.	10034.	2578.	-459.	-379.	74.	723.	972.	1033.	24914.
Precipitation on wetland	17.	34.	29.	5.	7.	0.	0.	12.	6.	0.	12.	3.	127.
Wetland consumptive use	6.	11.	12.	25.	66.	84.	105.	106.	68.	40.	12.	9.	544.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													30115.
Consumptive use by native vegetation in addition to precipitation	119.	119.	238.	476.	952.	1666.	2499.	2499.	1666.	952.	238.	238.	11662.
Outflow plus ground water storage change	961.	1444.	3587.	3427.	9023.	828.	-3063.	-2972.	-1654.	-269.	735.	790.	12835.
Surface outflow	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Ground water outflow	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	12000.
Change in ground water storage	-39.	444.	2587.	2427.	8023.	-172.	-4063.	-3972.	-2654.	-1269.	-265.	-210.	835.

TABLE 10.---Annual water budget, Fillmore (2A-24), Beaver River Basin

	CALENDAR YEAR 1959												
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Inflow from Central Utah Canal	0.	0.	0.	0.	1940.	850.	0.	0.	0.	0.	0.	0.	2790.
Ground water inflow from other watersheds	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	6000.
Tributary inflow	668.	629.	809.	1591.	2550.	1105.	587.	593.	498.	538.	485.	493.	10542.
Diversions to cropland	601.	566.	728.	1432.	4235.	1844.	528.	534.	448.	484.	436.	444.	12278.
30 percent to root-zone	180.	170.	218.	430.	1270.	553.	158.	160.	134.	145.	131.	133.	3683.
Pumped irrigation water	0.	0.	0.	0.	3571.	5357.	7398.	5102.	3061.	1020.	0.	0.	25509.
36 percent to root-zone	0.	0.	0.	0.	1286.	1929.	2663.	1837.	1102.	367.	0.	0.	9183.
Precipitation on cropland	1181.	3691.	1940.	1677.	770.	84.	221.	949.	1297.	548.	232.	1540.	14130.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	1361.	3861.	2159.	2106.	3326.	2566.	3043.	2946.	2533.	1061.	363.	1673.	26997.
Potential consumptive use on irrigated cropland	310.	307.	638.	2137.	4689.	9062.	9599.	7045.	3824.	1910.	463.	260.	40245.
Supply minus use	1051.	3553.	1520.	-31.	-1363.	-6496.	-6556.	-4099.	-1290.	-849.	-100.	1412.	-13248.
Cumulative soil moisture (maximum capacity-5,554 a.f.)	1985.	5538.	5554.	5523.	4160.	0.	0.	0.	0.	0.	0.	1412.	0.
Consumptive use deficit	0.	0.	0.	0.	0.	-2336.	-6556.	-4099.	-1290.	-849.	-100.	0.	-15230.
Actual consumptive use	310.	307.	638.	2137.	4689.	6726.	3043.	2946.	2533.	1061.	363.	260.	25015.
Addition to ground water	0.	0.	1504.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1504.
Net water surface evaporation	-1.	-8.	6.	17.	30.	51.	57.	42.	25.	20.	13.	-2.	250.
M and I consumptive use	12.	15.	21.	27.	27.	30.	42.	42.	30.	21.	18.	15.	302.
Supply to wetland and ground water	976.	952.	2568.	1618.	2377.	-107.	-1834.	-988.	-294.	484.	823.	847.	7418.
Precipitation on wetland	14.	44.	23.	20.	9.	1.	3.	11.	15.	6.	3.	18.	167.
Wetland consumptive use	6.	6.	15.	34.	47.	89.	114.	101.	59.	35.	13.	6.	525.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													39605.
Consumptive use by native vegetation in addition to precipitation	40.	40.	80.	160.	320.	560.	840.	840.	560.	320.	80.	80.	3920.
Outflow plus ground water storage change	944.	949.	2495.	1444.	2019.	-755.	-2785.	-1918.	-897.	136.	733.	779.	3140.
Surface outflow	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Ground water outflow	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	12000.
Change in ground water storage	-56.	-51.	1495.	444.	1019.	-1755.	-3785.	-2918.	-1897.	-864.	-267.	-221.	-8860.

TABLE 16.--Annual water budget, Fillmore (2A-24), Beaver River Basin

	CALENDAR YEAR 1960												Annual
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	
Inflow from Central Utah Canal	0.	0.	0.	0.	940.	0.	0.	0.	0.	0.	0.	0.	940.
Ground water inflow from other watersheds	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	6000.
Tributary inflow	546.	580.	1530.	4141.	6570.	2223.	928.	599.	628.	604.	567.	503.	19420.
Diversions to cropland	491.	522.	1377.	3727.	6853.	2001.	835.	539.	565.	544.	510.	453.	18418.
30 percent to root-zone	147.	157.	413.	1118.	2056.	600.	251.	162.	170.	163.	153.	136.	5525.
Pumped irrigation water	0.	0.	0.	0.	3999.	5998.	5713.	8284.	3428.	1143.	0.	0.	28564.
36 percent to root-zone	0.	0.	0.	0.	1440.	2159.	2057.	2982.	1234.	411.	0.	0.	10283.
Precipitation on cropland	1434.	1824.	2383.	854.	1276.	0.	0.	21.	1582.	1160.	2183.	559.	13276.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	1582.	1981.	2796.	1972.	4771.	2759.	2307.	3165.	2985.	1734.	2336.	695.	29083.
Potential consumptive use on irrigated cropland	235.	272.	771.	2106.	5180.	8883.	10037.	7001.	4816.	1966.	516.	263.	42045.
Supply minus use	1347.	1709.	2026.	-134.	-409.	-6124.	-7730.	-3836.	-1830.	-231.	1819.	432.	-12961.
Cumulative soil moisture (maximum capacity-5,554 a.f.)	2759.	4468.	5554.	5420.	5011.	0.	0.	0.	0.	0.	1819.	2251.	
Consumptive use deficit	0.	0.	0.	0.	0.	-1113.	-7730.	-3836.	-1830.	-231.	0.	0.	-14739.
Actual consumptive use	235.	272.	771.	2106.	5180.	7771.	2307.	3165.	2985.	1734.	516.	263.	27306.
Addition to ground water	0.	0.	939.	0.	0.	0.	0.	0.	0.	0.	0.	0.	939.
Net water surface evaporation	-2.	-1.	4.	19.	30.	54.	57.	48.	25.	18.	5.	2.	262.
M and I consumptive use	12.	15.	21.	27.	27.	30.	42.	42.	30.	21.	18.	15.	302.
Supply to wetland and ground water	888.	909.	2531.	3477.	4457.	-121.	-979.	-2135.	-331.	490.	891.	850.	10927.
Precipitation on wetland	17.	22.	28.	10.	15.	0.	0.	0.	19.	14.	26.	7.	156.
Wetland consumptive use	5.	6.	19.	33.	52.	87.	119.	101.	74.	36.	14.	6.	551.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													36996.
Consumptive use by native vegetation in addition to precipitation	74.	74.	148.	296.	592.	1036.	1554.	1554.	1036.	592.	148.	148.	7252.
Outflow plus ground water storage change	827.	851.	2393.	3158.	3829.	-1244.	-2652.	-3789.	-1422.	-124.	754.	703.	3280.
Surface outflow	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Ground water outflow	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	12000.
Change in ground water storage	-173.	-149.	1393.	2158.	2829.	-2244.	-3652.	-4789.	-2422.	-1124.	-246.	-297.	-8720.

TABLE 15.---Annual water budget, Fillmore (2A-24), Beaver River Basin-

CALENDAR YEAR 1961

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Inflow from Central Utah Canal	0.	0.	0.	0.	1080.	30.	0.	0.	0.	0.	0.	0.	1110.
Ground water inflow from other watersheds	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	6000.
Tributary inflow	487.	496.	675.	1858.	4226.	1397.	837.	703.	659.	691.	759.	663.	13457.
Diversions to cropland	438.	446.	607.	1672.	4883.	1287.	753.	633.	593.	622.	683.	597.	13221.
30 percent to root-zone	131.	134.	182.	502.	1465.	386.	226.	190.	178.	187.	205.	179.	3966.
Pumped irrigation water	0.	0.	0.	0.	3964.	5945.	8210.	5662.	3397.	1132.	0.	0.	28311.
36 percent to root-zone	0.	0.	0.	0.	1427.	2140.	2956.	2038.	1223.	408.	0.	0.	10192.
Precipitation on cropland	443.	1002.	2499.	1909.	949.	53.	654.	1318.	3248.	1529.	2172.	749.	16524.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	574.	1136.	2681.	2410.	3841.	2579.	3835.	3546.	4649.	2123.	2377.	928.	30682.
Potential consumptive use on irrigated cropland	276.	420.	597.	1732.	5335.	9152.	9599.	6979.	3433.	1714.	285.	264.	39784.
Supply minus use	299.	716.	2084.	678.	-1493.	-6573.	-5764.	-3432.	1216.	409.	2092.	664.	-9102.
Cumulative soil moisture (maximum capacity-5,554 a.f.)	2550.	3266.	5350.	5554.	4061.	0.	0.	0.	1216.	1625.	3717.	4381.	
Consumptive use deficit	0.	0.	0.	0.	0.	-2512.	-5764.	-3432.	0.	0.	0.	0.	-11708.
Actual consumptive use	276.	420.	597.	1732.	5335.	6640.	3835.	3546.	3433.	1714.	285.	264.	28076.
Addition to ground water	0.	0.	0.	474.	0.	0.	0.	0.	0.	0.	0.	0.	474.
Net water surface evaporation	2.	3.	4.	12.	31.	47.	47.	26.	13.	13.	5.	1.	203.
M and I consumptive use	12.	15.	21.	27.	27.	30.	42.	42.	30.	21.	18.	15.	302.
Supply to wetland and ground water	841.	845.	968.	2291.	2856.	-676.	-1933.	-1093.	-285.	563.	1031.	968.	6378.
Precipitation on wetland	5.	12.	30.	23.	11.	1.	8.	16.	38.	18.	26.	9.	195.
Wetland consumptive use	5.	9.	14.	27.	53.	90.	114.	100.	53.	31.	8.	6.	511.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													46245.
Consumptive use by native vegetation in addition to precipitation	51.	51.	102.	204.	408.	714.	1071.	1071.	714.	408.	102.	102.	4998.
Outflow plus ground water storage change	790.	797.	881.	2082.	2406.	-1479.	-3110.	-2249.	-1013.	142.	946.	868.	1064.
Surface outflow	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Ground water outflow	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	12000.
Change in ground water storage	-210.	-203.	-119.	1082.	1406.	-2479.	-4110.	-3249.	-2013.	-858.	-54.	-132.	-10936.

TABLE 16.---Annual water budget, Fillmore (2A-24), Beaver River Basin

	CALENDAR YEAR 1962											
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
	Acre-Feet											
Inflow from Central Utah Canal	0.	0.	0.	0.	0.	230.	520.	0.	0.	0.	0.	750.
Ground water inflow from other watersheds	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	6000.
Tributary inflow	680.	1040.	1530.	9388.	10044.	3984.	1551.	942.	777.	763.	706.	22038.
Diversions to cropland	612.	944.	1377.	8449.	9040.	3816.	1952.	848.	699.	687.	635.	29584.
30 percent to root-zone	184.	283.	413.	2535.	2712.	1145.	586.	254.	210.	206.	191.	8875.
Pumped irrigation water	0.	0.	0.	0.	3711.	5567.	7687.	5302.	3181.	1060.	0.	26508.
36 percent to root-zone	0.	0.	0.	0.	1336.	2004.	2767.	1909.	1145.	382.	0.	9543.
Precipitation on cropland	1677.	3511.	2826.	1350.	1940.	316.	337.	116.	728.	654.	327.	14699.
Direct use Ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	1860.	3795.	3239.	3684.	5988.	3465.	3690.	2279.	2083.	1241.	518.	19118.
Potential consumptive use on irrigated cropland	212.	311.	451.	2382.	5137.	7932.	8752.	6979.	4733.	2117.	659.	29939.
Supply minus use	1648.	3484.	2738.	1502.	851.	-4467.	-5062.	-4700.	-2650.	-875.	-142.	-6821.
Cumulative soil moisture (maximum capacity-5,554 a.f.)	5554.	5554.	5554.	5554.	5554.	1087.	0.	0.	0.	0.	0.	799.
Consumptive use deficit	0.	0.	0.	0.	0.	0.	-3975.	-4700.	-2650.	-875.	-142.	0.
Actual consumptive use	212.	311.	451.	2382.	5137.	7932.	4777.	2279.	2083.	1241.	518.	27597.
Addition to ground water	475.	3484.	2788.	1502.	851.	0.	0.	0.	0.	0.	0.	9101.
Net water surface evaporation	-3.	-7.	2.	14.	25.	41.	51.	49.	32.	19.	13.	238.
M and I consumptive use	12.	15.	21.	27.	27.	30.	42.	42.	30.	21.	18.	302.
Supply to wetland and ground water	1462.	4742.	4282.	8814.	7296.	1494.	-835.	-212.	-140.	635.	985.	28931.
Precipitation on wetland	20.	41.	33.	16.	23.	4.	4.	1.	9.	8.	4.	174.
Wetland consumptive use	4.	6.	11.	37.	51.	78.	104.	100.	73.	38.	18.	528.
Precipitation and consumptive use on idle land, native vegetation and town and community areas												41264.
Consumptive use by native vegetation in addition to precipitation	114.	114.	228.	456.	912.	1596.	2394.	2394.	1596.	912.	228.	11172.
Outflow plus ground water storage change	1364.	4663.	4176.	8337.	6356.	-176.	-3329.	-3305.	-1801.	-307.	742.	683.
Surface outflow	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Ground water outflow	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	12000.
Change in ground water storage	364.	3663.	3176.	7337.	5356.	-1176.	-4329.	-4305.	-2801.	-1307.	-258.	-317.
												5495.

TABLE 17.--Annual water budget, Fillmore (2A-24), Beaver River Basin

	CALENDAR YEAR 1963												
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Inflow from Central Utah Canal	0.	0.	0.	0.	947.	0.	0.	0.	0.	0.	0.	0.	947.
Ground water inflow from other watersheds	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	6000.
Tributary inflow	635.	595.	649.	1007.	3753.	1627.	805.	748.	601.	532.	527.	447.	11926.
Diversions to cropland	571.	535.	584.	906.	4325.	1464.	724.	673.	541.	479.	474.	402.	11680.
30 percent to root-zone	171.	161.	175.	272.	1297.	439.	217.	202.	162.	144.	142.	121.	3504.
Pumped irrigation water	0.	0.	0.	0.	4426.	6638.	9167.	6322.	3793.	1264.	0.	0.	31611.
36 percent to root-zone	0.	0.	0.	0.	1593.	2390.	3300.	2276.	1365.	455.	0.	0.	11380.
Precipitation on cropland	770.	1076.	1434.	2404.	137.	2046.	53.	1666.	1076.	654.	2721.	1044.	15079.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	941.	1236.	1609.	2676.	3028.	4875.	3570.	4144.	2603.	1252.	2863.	1165.	29963.
Potential consumptive use on irrigated cropland	213.	494.	592.	1558.	6210.	6954.	9455.	7156.	3944.	2508.	476.	234.	39794.
Supply minus use	728.	743.	1016.	1118.	-3182.	-2080.	-5885.	-3012.	-1340.	-1255.	2387.	931.	-9831.
Cumulative soil moisture (maximum capacity-5,554 a.f.)	1527.	2270.	3286.	4404.	1222.	0.	0.	0.	0.	0.	2387.	3318.	
Consumptive use deficit	0.	0.	0.	0.	0.	-858.	-5885.	-3012.	-1340.	-1255.	0.	0.	-12350.
Actual consumptive use	213.	494.	593.	1558.	6210.	6096.	3570.	4144.	2603.	1252.	476.	234.	27444.
Addition to ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Net water surface evaporation	1.	2.	8.	8.	39.	32.	61.	30.	21.	20.	3.	0.	224.
M and I consumptive use	12.	15.	21.	27.	27.	30.	42.	42.	30.	21.	18.	15.	302.
Supply to wetland and ground water	951.	917.	945.	1201.	2243.	-764.	-2315.	-1302.	-478.	392.	865.	811.	3463.
Precipitation on wetland	9.	13.	17.	28.	2.	24.	1.	20.	13.	8.	32.	12.	178.
Wetland consumptive use	4.	10.	14.	24.	62.	68.	112.	103.	61.	46.	13.	6.	523.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													42214.
Consumptive use by native vegetation in addition to precipitation	45.	45.	90.	180.	360.	630.	945.	945.	630.	360.	90.	90.	4410.
Outflow plus ground water storage change	911.	975.	350.	1025.	1822.	-2438.	-2372.	-2000.	-1156.	-6.	792.	728.	-1293.
Surface outflow	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Ground water outflow	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	12000.
Change in ground water storage	-89.	-125.	-142.	25.	823.	-2438.	-4372.	-3330.	-2156.	-1006.	-203.	-272.	-13293.

TABLE 18.--Annual water budget, Fillmore (2A-24), Beaver River Basin

	CALENDAR YEAR 1964												Annual
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	
Inflow from Central Utah Canal	0.	0.	0.	0.	0.	365.	0.	0.	0.	0.	0.	0.	365.
Ground water inflow from other watersheds	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	6000.
Tributary inflow	503.	540.	674.	2174.	12607.	4603.	1454.	506.	681.	645.	613.	748.	26188.
Diversions to cropland	452.	435.	607.	1957.	11346.	4508.	1345.	815.	613.	580.	552.	672.	23934.
30 percent to root-zone	136.	146.	152.	567.	3404.	1352.	403.	245.	184.	174.	166.	202.	7180.
Pumped irrigation water	0.	0.	0.	0.	4211.	6317.	8724.	6016.	3610.	1203.	0.	0.	20063.
36 percent to root-zone	0.	0.	0.	0.	1516.	2274.	3141.	2166.	1300.	433.	0.	0.	10830.
Precipitation on cropland	552.	570.	2562.	2858.	2109.	2109.	127.	1571.	854.	127.	2552.	2025.	13422.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	695.	1116.	2744.	3445.	7029.	5735.	3671.	3982.	2338.	734.	2717.	2227.	36432.
Potential consumptive use on irrigated cropland	232.	253.	398.	1612.	4921.	7007.	9686.	6567.	3914.	2343.	330.	302.	37565.
Supply minus use	463.	863.	2346.	1832.	2108.	-1272.	-6015.	-2585.	-1576.	-1610.	2387.	1925.	-1133.
Cumulative soil moisture (maximum capacity-5,554 a.f.)	3781.	4643.	5554.	5554.	5554.	4282.	0.	0.	0.	0.	2387.	4312.	
Consumptive use deficit	0.	0.	0.	0.	0.	0.	-1733.	-2585.	-1576.	-1610.	0.	0.	-7504.
Actual consumptive use	232.	253.	398.	1612.	4921.	7007.	7953.	3982.	2338.	734.	330.	302.	30061.
Addition to ground water	0.	0.	1435.	1832.	2108.	0.	0.	0.	0.	0.	0.	0.	5375.
Net water surface evaporation	2.	3.	3.	5.	22.	29.	53.	33.	24.	21.	4.	-4.	191.
M and I consumptive use	12.	15.	21.	27.	27.	30.	42.	42.	30.	21.	18.	15.	302.
Supply to wetland and ground water	853.	877.	2403.	3888.	10246.	1783.	-1645.	-1079.	-356.	496.	926.	1035.	19425.
Precipitation on wetland	7.	11.	30.	34.	25.	25.	1.	15.	10.	1.	30.	24.	218.
Wetland consumptive use	5.	5.	10.	25.	49.	69.	115.	95.	60.	43.	9.	7.	491.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													51699.
Consumptive use by native vegetation in addition to precipitation	100.	100.	200.	400.	800.	1400.	2100.	2100.	1400.	800.	200.	200.	9800.
Outflow plus ground water storage change	756.	783.	2223.	3496.	9422.	339.	-3859.	-3255.	-1806.	-245.	747.	852.	351.
Surface outflow	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Ground water outflow	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	12000.
Change in ground water storage	-244.	-217.	1223.	2496.	8422.	-661.	-4859.	-4255.	-2806.	-1245.	-253.	-148.	-2649.

TABLE 19.---Annual water budget, Fillmore (2A-24), Beaver River Basin

	CALENDAR YEAR 1965											
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
	Acre-Feet											
Inflow from Central Utah Canal	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Ground water inflow from other watersheds	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.
Tributary inflow	846.	933.	1021.	2988.	10202.	7348.	2174.	1251.	1014.	867.	789.	760.
Diversions to cropland	763.	840.	919.	2689.	9182.	6613.	1957.	1126.	913.	780.	710.	684.
30 percent to root-zone	229.	252.	276.	807.	2755.	1984.	587.	328.	274.	234.	212.	205.
Pumped irrigation water	0.	0.	0.	0.	4200.	6230.	8699.	6000.	3600.	1200.	0.	0.
36 percent to root-zone	0.	0.	0.	0.	1512.	2243.	3132.	2160.	1296.	432.	0.	0.
Precipitation on cropland	1149.	1487.	1224.	1234.	2921.	949.	601.	1603.	2362.	158.	1097.	2278.
Direct use Ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	1378.	1739.	1509.	2041.	7187.	5176.	4220.	4101.	3932.	324.	1310.	2483.
Potential consumptive use on irrigated cropland	302.	317.	537.	1856.	4181.	6902.	8642.	6355.	3279.	2243.	687.	292.
Supply minus use	1076.	1421.	972.	184.	3006.	-1726.	-4323.	-2254.	652.	-1419.	623.	2191.
Cumulative soil moisture (maximum capacity-5,554 a.f.)	5388.	5554.	5554.	5554.	5554.	3828.	0.	0.	652.	0.	623.	2814.
Consumptive use deficit	0.	0.	0.	0.	0.	0.	-495.	-2254.	0.	-767.	0.	0.
Actual consumptive use	302.	317.	537.	1856.	4181.	6902.	8148.	4101.	3279.	1477.	687.	292.
Addition to ground water	0.	1256.	972.	184.	3006.	0.	0.	0.	0.	0.	0.	0.
Net water surface evaporation	-1.	1.	9.	10.	17.	33.	41.	29.	11.	21.	10.	-5.
M and I consumptive use	12.	15.	21.	27.	27.	30.	42.	42.	30.	21.	18.	15.
Supply to wetland and ground water	1108.	2421.	2188.	2828.	9397.	3558.	-1128.	-818.	-96.	659.	1048.	1045.
Precipitation on wetland	14.	18.	15.	15.	35.	11.	7.	19.	28.	2.	13.	27.
Wetland consumptive use	6.	7.	12.	29.	42.	68.	103.	92.	50.	41.	19.	7.
Precipitation and consumptive use on idle land, native vegetation and town and community areas												
Consumptive use by native vegetation in addition to precipitation	110.	11.	226.	452.	904.	1582.	2372.	2373.	1582.	84.	225.	226.
Outflow plus ground water storage change	1002.	2319.	1964.	2362.	8486.	1920.	-3500.	-3264.	-1701.	-284.	816.	829.
Surface outflow	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Ground water outflow	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.	1000.
Change in ground water storage	2.	1319.	964.	1362.	7486.	920.	-4596.	-4264.	-2701.	-1284.	-184.	-161.
												-1139.

TABLE 20. ---Representative potential consumptive use (calendar year 1963), Meadow (2A-25a), Beaver River Basin

Land use	Acres	MONTHLY CONSUMPTIVE USE, Inches												Annual Use	
		Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Inches	Acre-Feet
		Irrigated Cropland													
Alfalfa	2,328	.20	.47	.56	1.35	5.42	5.91	9.05	7.68	4.24	2.63	.44	.22	38.17	7,405
Hayland	27	.20	.47	.56	1.79	4.52	4.82	7.50	6.59	3.72	2.67	.51	.22	33.56	76
Pasture	1,138	.20	.47	.56	1.79	4.52	4.82	7.50	6.59	3.72	2.67	.51	.22	33.56	3,183
Small grain	804	.12	.29	.35	1.09	5.32	6.28	5.55	1.81	1.07	.84	.28	.13	23.14	1,551
Corn	60	.12	.29	.35	.53	2.26	3.45	7.99	7.83	3.34	.84	.28	.13	27.42	137
Suburban crops	192	.20	.47	.56	1.79	4.52	4.82	7.50	6.59	3.72	2.67	.51	.22	33.56	537
Total use	4,549	.18	.43	.52	1.42	5.09	5.62	7.96	6.32	3.51	2.30	.43	.20	34.00 ^a	12,889
Wetlands (Phreatophytes)															
Meadow W2	141	.27	.62	.75	1.20	3.06	3.56	6.20	5.94	3.55	2.73	.85	.37	29.11	342
Meadow W3	34	.43	.99	1.18	1.85	4.77	5.65	9.79	9.27	5.56	4.25	1.32	.59	45.65	129
Salt grass W2	392	.27	.62	.75	1.20	3.06	3.56	6.20	5.94	3.55	2.73	.85	.37	29.11	951
Greasewood W1	176	.12	.29	.35	.53	1.25	1.67	3.59	3.77	2.48	1.62	.35	.13	16.17	237
Greasewood W2	13	.19	.46	.63	.99	2.66	4.34	8.97	9.42	5.78	3.88	.89	.23	38.43	42
Total use	756	.24	.54	.66	1.06	2.70	3.22	5.78	5.61	3.41	2.54	.76	.32	26.84 ^a	1,701
Consumptive Use of Precipitation															
Idle land	969													10.42	841
Native vegetation	16,852													10.42	14,633
Town and community area	2,608													10.42	2,265
Water Surface Evaporation															
Net evaporation	54	.67	.44	1.78	2.22	8.00	6.44	12.89	6.00	4.44	4.22	.44	0	47.55	214
GRAND TOTAL	25,788													15.14 ^a	32,543

^aWeighted value.

TABLE 21.--Annual water budget, Meadow (2A-25a), Beaver River Basin

CALENDAR YEAR 1956													
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Ground water inflow from other watersheds	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	600.
Tributary inflow	403.	376.	611.	1637.	2471.	941.	421.	310.	253.	290.	253.	281.	8247.
Diversions to cropland	169.	157.	256.	685.	1033.	394.	176.	130.	106.	121.	106.	118.	3451.
41 percent to root-zone	69.	65.	105.	281.	424.	161.	72.	53.	43.	50.	43.	48.	1415.
Pumped irrigation water	0.	0.	0.	0.	926.	1424.	2065.	1424.	854.	427.	0.	0.	7120.
41 percent to root-zone	0.	0.	0.	0.	380.	584.	847.	584.	350.	175.	0.	0.	2919.
Precipitation on cropland	462.	603.	25.	733.	324.	14.	240.	106.	14.	561.	92.	233.	3406.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	531.	667.	130.	1014.	1128.	759.	1159.	743.	408.	785.	135.	281.	7740.
Potential consumptive use on irrigated cropland	138.	81.	230.	659.	1749.	2837.	2971.	2243.	1680.	708.	119.	90.	13505.
Supply minus use	393.	586.	-101.	355.	-622.	-2077.	-1812.	-1500.	-1273.	77.	16.	191.	-5765.
Cumulative soil moisture (maximum capacity-1,570 a.f.)	1177.	1570.	1469.	1570.	948.	0.	0.	0.	0.	77.	93.	285.	
Consumptive use deficit	0.	0.	0.	0.	0.	-1129.	-1812.	-1500.	-1273.	0.	0.	0.	-5714.
Actual consumptive use	138.	81.	230.	659.	1749.	1708.	1159.	743.	408.	708.	119.	90.	7791.
Addition to ground water	0.	193.	0.	255.	0.	0.	0.	0.	0.	0.	0.	0.	448.
Net water surface evaporation	-2.	-1.	12.	9.	29.	47.	43.	40.	34.	13.	12.	1.	235.
M and I consumptive use	2.	2.	3.	4.	5.	5.	7.	8.	5.	3.	3.	2.	49.
Supply to wetland and ground water	384.	554.	541.	1648.	1684.	194.	-497.	-325.	-129.	100.	245.	280.	4677.
Precipitation on wetland	77.	100.	4.	122.	54.	2.	40.	18.	2.	93.	15.	39.	566.
Wetland consumptive use	31.	17.	49.	82.	155.	271.	360.	333.	273.	131.	35.	24.	1760.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													15293.
Consumptive use by native vegetation in addition to precipitation	33.	33.	66.	132.	264.	462.	693.	693.	462.	264.	66.	66.	3234.
Outflow plus ground water storage change	397.	604.	430.	1555.	1319.	-537.	-1510.	-1333.	-862.	-202.	159.	228.	249.
Surface outflow	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Ground water outflow	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	6000.
Change in ground water storage	-103.	104.	-70.	1055.	819.	-1037.	-2010.	-1833.	-1362.	-702.	-341.	-272.	-5751.

TABLE 22 .--Annual water budget, Meadow (2A-25a), Beaver River Basin

	CALENDAR YEAR 1957												
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Ground water inflow from other watersheds	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	600.
Tributary inflow	308.	337.	500.	2515.	7349.	6151.	1361.	728.	498.	514.	461.	430.	21152.
Diversions to cropland	129.	141.	209.	1052.	3074.	2573.	569.	304.	208.	215.	193.	180.	8849.
41 percent to root-zone	53.	58.	86.	431.	1260.	1055.	233.	125.	85.	88.	79.	74.	3628.
Pumped irrigation water	0.	0.	0.	0.	942.	1449.	2101.	1449.	870.	435.	0.	0.	7246.
41 percent to root-zone	0.	0.	0.	0.	386.	594.	861.	594.	357.	178.	0.	0.	2971.
Precipitation on cropland	709.	134.	719.	1502.	899.	649.	219.	204.	4.	321.	451.	63.	5873.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	762.	192.	805.	1933.	2546.	2298.	1313.	923.	446.	587.	530.	137.	12472.
Potential consumptive use on irrigated cropland	82.	140.	235.	574.	1395.	2454.	2908.	2449.	1488.	638.	106.	116.	12583.
Supply minus use	679.	52.	570.	1359.	1150.	-156.	-1594.	-1525.	-1042.	-51.	424.	22.	-111.
Cumulative soil moisture (maximum capacity-1,570 a.f.)	964.	1016.	1570.	1570.	1570.	1414.	0.	0.	0.	0.	424.	446.	
Consumptive use deficit	0.	0.	0.	0.	0.	0.	-180.	-1525.	-1042.	-51.	0.	0.	-2798.
Actual consumptive use	82.	140.	235.	574.	1395.	2454.	2727.	923.	446.	587.	106.	116.	9785.
Addition to ground water	0.	0.	16.	1359.	1150.	0.	0.	0.	0.	0.	0.	0.	2526.
Net water surface evaporation	-5.	4.	4.	-1.	10.	25.	37.	35.	24.	11.	7.	3.	155.
M and I consumptive use	2.	2.	3.	4.	5.	5.	7.	8.	5.	3.	3.	2.	49.
Supply to wetland and ground water	308.	323.	474.	3491.	6888.	4522.	-272.	-316.	-177.	283.	422.	401.	17475.
Precipitation on wetland	118.	22.	120.	250.	149.	108.	36.	34.	1.	53.	75.	11.	976.
Wetland consumptive use	18.	30.	50.	72.	123.	234.	352.	363.	242.	118.	31.	31.	1665.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													26373.
Consumptive use by native vegetation in addition to precipitation	84.	84.	168.	336.	672.	1176.	1764.	1764.	1176.	672.	168.	168.	8233.
Outflow plus ground water storage change	323.	231.	375.	3333.	6241.	3219.	-1808.	-2077.	-1340.	-453.	298.	213.	8554.
Surface outflow	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Ground water outflow	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	6000.
Change in ground water storage	-177.	-269.	-125.	2833.	5741.	2719.	-2308.	-2577.	-1840.	-953.	-202.	-287.	2554.

TABLE 24.---Annual water budget, Meadow (2A-25a), Beaver River Basin

	CALENDAR YEAR 1959												
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Ground water inflow from other watersheds	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	600.
Tributary inflow	344.	324.	418.	821.	1318.	570.	303.	307.	256.	278.	251.	255.	5445.
Diversions to cropland	144.	136.	175.	343.	551.	238.	127.	128.	107.	116.	105.	106.	2278.
41 percent to root-zone	59.	56.	72.	141.	226.	98.	52.	53.	44.	48.	43.	44.	934.
Pumped irrigation water	0.	0.	0.	0.	1256.	1933.	2803.	1933.	1160.	580.	0.	0.	9664.
41 percent to root-zone	0.	0.	0.	0.	515.	793.	1149.	793.	476.	238.	0.	0.	3962.
Precipitation on cropland	88.	959.	571.	490.	180.	14.	28.	476.	310.	204.	74.	458.	3853.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	147.	1015.	643.	631.	921.	904.	1229.	1321.	830.	490.	117.	502.	8749.
Potential consumptive use on irrigated cropland	100.	99.	213.	738.	1459.	2773.	3062.	2359.	1291.	666.	159.	84.	13004.
Supply minus use	47.	915.	430.	-108.	-538.	-1868.	-1832.	-1038.	-461.	-176.	-42.	418.	-4255.
Cumulative soil moisture (maximum capacity-1,570 a.f.)	377.	1292.	1570.	1462.	924.	0.	0.	0.	0.	0.	0.	418.	-4494.
Consumptive use deficit	0.	0.	0.	0.	0.	-944.	-1832.	-1038.	-461.	-176.	-42.	0.	8510.
Actual consumptive use	100.	99.	213.	738.	1459.	1829.	1229.	1321.	830.	490.	117.	84.	151.
Addition to ground water	0.	0.	151.	0.	0.	0.	0.	0.	0.	0.	0.	0.	234.
Net water surface evaporation	3.	-6.	5.	15.	28.	46.	56.	36.	24.	18.	12.	-2.	49.
M and I consumptive use	2.	2.	3.	4.	5.	5.	7.	8.	5.	3.	3.	2.	
Supply to wetland and ground water	330.	322.	539.	711.	594.	-321.	-911.	-532.	-242.	22.	243.	261.	1017.
Precipitation on wetland	15.	159.	95.	81.	30.	2.	5.	79.	52.	34.	12.	76.	640.
Wetland consumptive use	22.	21.	46.	92.	129.	265.	371.	350.	210.	123.	46.	22.	1698.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													17293.
Consumptive use by native vegetation in addition to precipitation	22.	22.	44.	88.	176.	308.	462.	462.	308.	176.	44.	44.	2156.
Outflow plus ground water storage change	301.	438.	548.	612.	319.	-891.	-1739.	-1265.	-708.	-243.	165.	271.	-2196.
Surface outflow	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Ground water outflow	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	6000.
Change in ground water storage	-199.	-62.	45.	112.	-181.	-1391.	-2239.	-1765.	-1208.	-743.	-335.	-229.	-8196.

TABLE 26 .--Annual water budget, Meadow (2A-25a), Beaver River Basin

CALENDAR YEAR 1961

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet.												
Ground water inflow from other watersheds	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	600.
Tributary inflow	251.	256.	348.	959.	2182.	721.	432.	362.	341.	359.	393.	342.	6946.
Diversions to cropland	105.	107.	145.	401.	913.	301.	181.	151.	142.	150.	164.	143.	2907.
41 percent to root-zone	43.	44.	60.	165.	374.	124.	74.	62.	58.	61.	67.	59.	1192.
Pumped irrigation water	0.	0.	0.	0.	1393.	2144.	3108.	2144.	1286.	643.	0.	0.	10718.
41 percent to root-zone	0.	0.	0.	0.	571.	879.	1274.	879.	527.	264.	0.	0.	4394.
Precipitation on cropland	201.	275.	712.	959.	444.	0.	310.	557.	853.	441.	511.	243.	5507.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	244.	319.	772.	1123.	1390.	1003.	1659.	1498.	1439.	766.	579.	302.	11093.
Potential consumptive use on irrigated cropland	89.	141.	200.	599.	1659.	2800.	3062.	2337.	1160.	598.	94.	85.	12824.
Supply minus use	155.	178.	572.	524.	-269.	-1797.	-1403.	-839.	279.	168.	484.	217.	-1731.
Cumulative soil moisture (maximum capacity-1,570 a.f.)	738.	916.	1489.	1570.	1301.	0.	0.	0.	279.	447.	931.	1148.	
Consumptive use deficit	0.	0.	0.	0.	0.	-497.	-1403.	-839.	0.	0.	0.	0.	-2739.
Actual consumptive use	89.	141.	200.	599.	1659.	2303.	1659.	1498.	1160.	598.	94.	85.	10085.
Addition to ground water	0.	0.	0.	443.	0.	0.	0.	0.	0.	0.	0.	0.	443.
Net water surface evaporation	1.	3.	4.	7.	26.	42.	44.	21.	13.	12.	7.	1.	180.
M and I consumptive use	2.	2.	3.	4.	5.	5.	7.	8.	5.	3.	3.	2.	49.
Supply to wetland and ground water	255.	258.	332.	1276.	1255.	-279.	-918.	-558.	-212.	-69.	366.	331.	2173.
Precipitation on wetland	33.	46.	118.	159.	74.	0.	52.	93.	142.	73.	85.	40.	915.
Wetland consumptive use	20.	30.	43.	75.	147.	267.	371.	347.	188.	111.	28.	23.	1648.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													24725.
Consumptive use by native vegetation in addition to precipitation	27.	27.	54.	108.	216.	378.	567.	567.	378.	216.	54.	54.	2646.
Outflow plus ground water storage change	241.	246.	354.	1253.	966.	-924.	-1804.	-1379.	-637.	-184.	370.	294.	-1206.
Surface outflow	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Ground water outflow	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	6000.
Change in ground water storage	-259.	-254.	-146.	753.	466.	-1424.	-2304.	-1879.	-1137.	-684.	-130.	-206.	-7206.

TABLE 27.--Annual water budget, Meadow (2A-25a), Beaver River Basin

	CALENDAR YEAR 1962												Annual
	Jan.	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	
	Acre-Feet												
Ground water inflow from other watersheds	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	600.
Tributary inflow	351.	541.	791.	4848.	5187.	2056.	821.	486.	402.	394.	364.	298.	16539.
Diversions to cropland	147.	226.	331.	2028.	2170.	860.	343.	203.	168.	165.	152.	124.	6919.
41 percent to root-zone	60.	93.	136.	831.	890.	353.	141.	83.	69.	68.	62.	51.	2837.
Pumped irrigation water	0.	0.	0.	0.	1305.	2007.	2910.	2007.	1204.	602.	0.	0.	10036.
41 percent to root-zone	0.	0.	0.	0.	535.	823.	1193.	823.	494.	247.	0.	0.	4115.
Precipitation on cropland	501.	783.	596.	578.	553.	88.	338.	14.	430.	92.	116.	338.	4428.
Direct use Ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	561.	876.	731.	1410.	1978.	1264.	1672.	920.	993.	406.	179.	389.	11379.
Potential consumptive use on irrigated cropland	68.	101.	151.	822.	1598.	2428.	2793.	2337.	1596.	738.	226.	89.	12947.
Supply minus use	492.	775.	580.	587.	380.	-1164.	-1120.	-1417.	-604.	-332.	-47.	301.	-1568.
Gumulative soil moisture (maximum capacity-1,570 a.f.)	1570.	1570.	1570.	1570.	1570.	406.	0.	0.	0.	0.	0.	301.	
Consumptive use deficit	0.	0.	0.	0.	0.	0.	-715.	-1417.	-604.	-332.	-47.	0.	-3114.
Actual consumptive use	68.	101.	151.	822.	1598.	2428.	2078.	920.	993.	406.	179.	89.	9833.
Addition to ground water	70.	775.	580.	587.	380.	0.	0.	0.	0.	0.	0.	0.	2393.
Net water surface evaporation	-2.	-3.	5.	11.	23.	38.	47.	44.	27.	19.	11.	0.	219.
M and I consumptive use	2.	2.	3.	4.	5.	5.	7.	8.	5.	3.	3.	2.	49.
Supply to wetland and ground water	411.	1275.	1277.	4639.	4165.	888.	-517.	-423.	-142.	108.	337.	295.	12312.
Precipitation on wetland	83.	130.	99.	96.	92.	15.	56.	2.	71.	15.	19.	56.	736.
Wetland consumptive use	15.	21.	32.	103.	141.	232.	338.	347.	259.	136.	66.	24.	1715.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													19887.
Consumptive use by native vegetation in addition to precipitation	65.	65.	130.	260.	520.	910.	1365.	1365.	910.	520.	130.	130.	6370.
Outflow plus ground water storage change	414.	1318.	1214.	4372.	3596.	-239.	-2164.	-2132.	-1240.	-533.	161.	197.	4963.
Surface outflow	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Ground water outflow	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	6000.
Change in ground water storage	-86.	818.	714.	3871.	5896.	739.	-2664.	-2632.	-1740.	-1033.	-339.	-302.	-1037.

TABLE 28.--Annual water budget, Meadow (2A-25a), Beaver River Basin

CALENDAR YEAR 1963													
Jan.	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual	
Acre-Feet													
Ground water inflow from other watersheds													
50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	600.	
328.	307.	335.	522.	1936.	843.	416.	386.	310.	274.	272.	231.	6157.	
Diversions to cropland													
137.	128.	140.	217.	810.	352.	174.	161.	130.	115.	114.	97.	2576.	
41 percent to root-zone													
56.	53.	58.	89.	332.	145.	71.	66.	53.	47.	47.	40.	1056.	
Pumped irrigation water													
0.	0.	0.	0.	1556.	2394.	3471.	2394.	1436.	718.	0.	0.	11970.	
41 percent to root-zone													
0.	0.	0.	0.	638.	982.	1423.	982.	589.	294.	0.	0.	4908.	
Precipitation on cropland													
63.	342.	374.	490.	7.	575.	10.	476.	296.	162.	878.	286.	3949.	
Direct use ground water													
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
Total root-zone supply													
120.	395.	431.	579.	977.	1701.	1494.	1524.	938.	504.	925.	325.	9912.	
Potential consumptive use on irrigated cropland													
69.	165.	198.	540.	1930.	2130.	3016.	2396.	1331.	873.	163.	76.	12888.	
Supply minus use													
51.	229.	233.	40.	-953.	-429.	-1522.	-873.	-393.	-370.	761.	250.	-2975.	
Cumulative soil moisture (maximum capacity-1,570 a.f.)													
352.	581.	814.	854.	0.	0.	0.	0.	0.	0.	761.	1011.		
0.	0.	0.	0.	-99.	-429.	-1522.	-873.	-393.	-370.	0.	0.	-3686.	
Actual consumptive use													
69.	165.	198.	540.	1831.	1701.	1494.	1524.	938.	504.	163.	76.	9202.	
Addition to ground water													
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
Net water surface evaporation													
3.	2.	8.	10.	36.	29.	58.	27.	20.	19.	2.	0.	214.	
M and I consumptive use													
2.	2.	3.	4.	5.	5.	7.	8.	5.	3.	3.	2.	49.	
Supply to wetland and ground water													
317.	301.	317.	469.	975.	-267.	-1094.	-647.	-307.	-39.	270.	239.	530.	
11.	57.	62.	81.	1.	96.	0.	79.	49.	27.	146.	47.	656.	
Wetland consumptive use													
15.	35.	42.	67.	171.	203.	365.	356.	216.	162.	48.	20.	1701.	
Precipitation and consumptive use on idle land, native vegetation and town and community areas													
Consumptive use by native vegetation in addition to precipitation													
23.	23.	46.	92.	184.	322.	483.	483.	322.	184.	46.	46.	2254.	
17726.													
Outflow plus ground water storage change													
289.	299.	291.	392.	622.	-697.	-1942.	-1406.	-796.	-358.	322.	220.	-2769.	
Surface outflow													
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
Ground water outflow													
500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	6000.	
Change in ground water storage													
-211.	-201.	-209.	-108.	122.	-1197.	-2442.	-1906.	-1296.	-858.	-178.	-280.	-8769.	

TABLE 29.--Annual water budget, Meadow (2A-25a), Beaver River Basin

	CALENDAR YEAR 1964												
	Jan.	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Ground water inflow from other watersheds	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	600.
Tributary inflow	260.	280.	348.	1122.	6510.	2370.	771.	468.	351.	333.	317.	385.	13515.
Diversions to cropland	109.	117.	145.	469.	2723.	991.	322.	196.	147.	139.	133.	161.	5654.
41 percent to root-zone	45.	48.	60.	192.	1117.	407.	132.	80.	60.	57.	54.	66.	2318.
Pumped irrigation water	0.	0.	0.	0.	1481.	2278.	3304.	2278.	1367.	683.	0.	0.	11392.
41 percent to root-zone	0.	0.	0.	0.	607.	934.	1355.	934.	560.	280.	0.	0.	4671.
Precipitation on cropland	233.	374.	631.	1012.	582.	539.	63.	374.	324.	35.	807.	532.	5507.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	277.	422.	691.	1204.	2305.	1880.	1550.	1388.	945.	372.	862.	598.	12496.
Potential consumptive use on irrigated cropland	75.	82.	136.	558.	1531.	2146.	3089.	2200.	1321.	816.	115.	98.	12168.
Supply minus use	202.	340.	555.	646.	775.	-266.	-1539.	-812.	-376.	-444.	747.	501.	328.
Cumulative soil moisture (maximum capacity-1,570 a.f.)	1213.	1553.	1570.	1570.	1570.	1304.	0.	0.	0.	0.	747.	1247.	
Consumptive use deficit	0.	0.	0.	0.	0.	0.	-235.	-812.	-376.	-444.	0.	0.	-1867.
Actual consumptive use	75.	82.	136.	558.	1531.	2146.	2854.	1388.	945.	372.	115.	98.	10301.
Addition to ground water	0.	0.	537.	646.	775.	0.	0.	0.	0.	0.	0.	0.	1958.
Net water surface evaporation	1.	1.	5.	2.	20.	27.	51.	31.	21.	19.	3.	-3.	177.
M and I consumptive use	2.	2.	3.	4.	5.	5.	7.	8.	5.	3.	3.	2.	49.
Supply to wetland and ground water	263.	279.	868.	1619.	5586.	1048.	-724.	-535.	-245.	24.	306.	370.	8858.
Precipitation on wetland	39.	62.	105.	168.	97.	90.	11.	62.	54.	6.	134.	88.	915.
Wetland consumptive use	17.	17.	29.	70.	135.	205.	374.	326.	215.	151.	34.	26.	1599.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													24725.
Consumptive use by native vegetation in addition to precipitation	54.	54.	108.	216.	432.	756.	1134.	1134.	756.	432.	108.	108.	5292.
Outflow plus ground water storage change	230.	269.	836.	1502.	5115.	-176.	-2221.	-1934.	-1162.	-553.	299.	324.	2882.
Surface outflow	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Ground water outflow	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	6000.
Change in ground water storage	-270.	-231.	336.	1002.	4615.	-324.	-2721.	-2434.	-1662.	-1053.	-201.	-176.	-3118.

TABLE 30.--Annual water budget, Meadow (1A-15a), Beaver River Basin

	CALENDAR YEAR 1965											
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
	Acre-Feet											
Ground water inflow from other watersheds	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.
Trietary inflow	437.	463.	517.	1542.	3013.	3791.	1121.	645.	523.	444.	411.	393.
Diversions to cropland	183.	201.	220.	645.	2222.	1567.	469.	270.	219.	188.	170.	164.
41 percent to root-zone	75.	83.	90.	264.	911.	651.	192.	111.	90.	77.	70.	67.
Pumped irrigation water	0.	0.	0.	0.	1476.	1071.	3093.	2271.	1362.	681.	0.	0.
41 percent to root-zone	0.	0.	0.	0.	605.	931.	1350.	931.	558.	276.	0.	0.
Precipitation on cropland	420.	585.	342.	194.	702.	286.	370.	178.	811.	60.	271.	539.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	495.	666.	432.	458.	1116.	1867.	1913.	1521.	1459.	416.	341.	607.
Potential consumptive use on irrigated cropland	96.	103.	180.	642.	1302.	2114.	1756.	2129.	1108.	781.	235.	95.
Supply minus use	397.	565.	253.	-184.	916.	-247.	-645.	-606.	351.	-366.	106.	512.
Cumulative soil moisture (maximum capacity-1,570 a.f.)	1570.	1570.	1570.	1386.	1570.	1323.	478.	0.	351.	0.	106.	616.
Consumptive use deficit	0.	0.	0.	0.	0.	0.	0.	-129.	0.	-15.	0.	0.
Actual consumptive use	96.	102.	180.	642.	1302.	2114.	2758.	2000.	1108.	767.	235.	45.
Addition to ground water	74.	565.	253.	0.	731.	0.	0.	0.	0.	0.	0.	0.
Net water surface evaporation	-1.	-1.	8.	11.	18.	30.	38.	17.	8.	19.	9.	-5.
M and I consumptive use	2.	2.	3.	4.	5.	5.	7.	6.	5.	3.	3.	1.
Supply to wetland and ground water	486.	1014.	728.	1312.	4356.	1225.	-415.	-381.	-89.	116.	379.	376.
Precipitation on wetland	70.	97.	57.	32.	117.	47.	62.	80.	135.	10.	45.	90.
Wetland consumptive use	21.	22.	38.	80.	115.	202.	334.	316.	180.	145.	69.	25.
Precipitation and consumptive use on idle land, native vegetation and town and community areas												
Consumptive use by native vegetation in addition to precipitation	61.	61.	122.	244.	486.	854.	1261.	1281.	854.	488.	122.	122.
Outflow plus ground water storage change	473.	1028.	625.	1020.	4070.	1217.	-1969.	-1699.	-988.	-507.	233.	319.
Surface outflow	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Ground water outflow	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.	500.
Change in ground water storage	-23.	528.	125.	520.	3570.	717.	-2469.	-2399.	-1488.	-1007.	-277.	-181.
												-2378.

TABLE 31.--Representative potential consumptive use (calendar year 1961), Kanosh (2A-25b), Beaver River Basin

Land use	Acres	MONTHLY CONSUMPTIVE USE, Inches												Annual Use	
		Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Inches	Acre-Feet
		Irrigated Cropland													
Alfalfa	5,176	.25	.40	.57	1.50	4.66	7.77	9.19	7.49	3.69	1.80	.26	.24	37.82	16,314
Hayland	43	.25	.40	.57	1.99	3.88	6.33	7.62	6.43	3.24	1.83	.29	.24	33.07	119
Pasture	191	.25	.40	.57	1.99	3.88	6.33	7.62	6.43	3.24	1.83	.29	.24	33.07	526
Small grain	1,577	.16	.25	.35	1.22	4.57	8.26	5.63	1.77	.93	.58	.16	.15	24.02	3,161
Corn	197	.16	.25	.35	.58	1.94	4.54	8.11	7.63	2.91	.58	.16	.15	27.37	449
Suburban crops	268	.25	.40	.57	1.99	3.88	6.33	7.62	6.43	3.24	1.83	.29	.24	33.07	739
Total use	7,452	.23	.36	.51	1.41	4.49	7.65	8.25	6.17	3.04	1.50	.23	.22	34.09 ^a	21,308
Wetlands (Phreatophytes)															
Salt grass W2	196	.35	.53	.75	1.33	2.63	4.68	6.29	5.80	3.09	1.87	.49	.41	28.24	461
Total use	196	.35	.53	.75	1.33	2.63	4.68	6.29	5.80	3.09	1.87	.49	.41	28.24 ^a	461
Consumptive Use of Precipitation															
Idle land	3,653													14.53	4,423
Native vegetation	22,026													14.53	26,670
Town and community area	5,806													14.53	7,030
Water Surface Evaporation															
Net evaporation	24	0	.50	.50	1.50	5.50	9.00	9.50	4.50	2.50	2.50	1.50	0	37.50	75
GRAND TOTAL	39,157													18.38 ^a	59,967

^aWeighted value.

TABLE 32.--Annual water budget, Kanosh (2A-25b), Beaver River Basin

	CALENDAR YEAR 1956													
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual	
	Acre-Feet													
Tributary inflow	378.	353.	574.	1535.	2317.	882.	395.	291.	238.	273.	236.	264.	7736.	
Diversions to cropland	283.	265.	430.	1151.	1738.	661.	296.	218.	178.	205.	177.	198.	5802.	
30 percent to root-zone	85.	79.	129.	345.	521.	198.	89.	65.	54.	61.	53.	59.	1741.	
Pumped irrigation water	0.	0.	0.	0.	1146.	2027.	2468.	1851.	970.	353.	0.	0.	8815.	
41 percent to root-zone	0.	0.	0.	0.	470.	831.	1012.	759.	398.	145.	0.	0.	3614.	
Precipitation on cropland	757.	988.	40.	1202.	531.	23.	393.	173.	23.	919.	150.	381.	5580.	
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
Total root-zone supply	842.	1067.	170.	1547.	1523.	1053.	1494.	998.	474.	1125.	203.	441.	10935.	
Potential consumptive use on irrigated land	221.	131.	370.	987.	2958.	4842.	5003.	3702.	2750.	1113.	184.	144.	22406.	
Supply minus use	620.	937.	-200.	560.	-1436.	-3789.	-3509.	-2705.	-2276.	12.	19.	297.	-11471.	
Cumulative soil moisture (maximum capacity-2,811 a.f.)	1689.	2626.	2426.	2811.	1375.	0.	0.	0.	0.	12.	31.	327.		
Consumptive use deficit	0.	0.	0.	0.	0.	-2414.	-3509.	-2705.	-2276.	0.	0.	0.	-10904.	
Actual consumptive use	221.	131.	370.	987.	2958.	2428.	1494.	998.	474.	1113.	184.	144.	11502.	
Addition to ground water	0.	0.	0.	175.	0.	0.	0.	0.	0.	0.	0.	0.	175.	
Net water surface evaporation	-1.	-1.	5.	4.	12.	20.	18.	17.	14.	5.	5.	0.	100.	
M and I consumptive use	3.	5.	7.	9.	9.	10.	14.	14.	10.	7.	6.	5.	99.	
Supply to wetland and ground water	291.	269.	433.	1351.	1305.	-178.	-738.	-564.	-238.	55.	172.	199.	2357.	
Precipitation on wetland	20.	26.	1.	32.	14.	1.	10.	5.	1.	24.	4.	10.	147.	
Wetland consumptive use	9.	5.	14.	24.	45.	77.	100.	91.	73.	36.	10.	7.	492.	
Precipitation and consumptive use on idle land, native vegetation and town and community areas													23613.	
Consumptive use by native vegetation in addition to precipitation	50.	50.	100.	200.	400.	700.	1050.	1050.	700.	400.	100.	100.	4900.	
Outflow plus ground water storage change	252.	240.	320.	1159.	873.	-954.	-1877.	-1701.	-1010.	-357.	66.	102.	-2888.	
Surface outflow	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
Ground water outflow	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	600.	
Change in ground water storage	202.	190.	270.	1109.	823.	-1004.	-1927.	-1751.	-1060.	-407.	16.	52.	-3488.	

TABLE 33.--Annual water budget, Kanosh (2A-25b), Beaver River Basin

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
Tributary inflow	289.	316.	470.	2358.	6893.	5769.	1276.	682.	468.	483.	432.	404.	19840.
Diversions to cropland	217.	237.	352.	1768.	5170.	4327.	957.	511.	351.	362.	324.	303.	14880.
30 percent to root-zone	65.	71.	106.	531.	1551.	1298.	287.	153.	105.	109.	97.	91.	4464.
Pumped irrigation water	0.	0.	0.	0.	1246.	2205.	2685.	2013.	1055.	384.	0.	0.	9588.
41 percent to root-zone	0.	0.	0.	0.	511.	904.	1101.	825.	433.	157.	0.	0.	3931.
Precipitation on cropland	1161.	220.	1178.	2461.	1473.	1063.	358.	335.	6.	526.	739.	104.	9624.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	1226.	291.	1284.	2991.	3535.	3265.	1746.	1314.	544.	792.	837.	195.	18019.
Potential consumptive use on irrigated land	132.	224.	377.	860.	2360.	4188.	4897.	4042.	2434.	1003.	165.	186.	20868.
Supply minus use	1094.	66.	907.	2132.	1175.	-923.	-3151.	-2728.	-1891.	-211.	672.	9.	-2849.
Cumulative soil moisture (maximum capacity-2,811 a.f.)	1421.	1487.	2395.	2811.	2811.	1888.	0.	0.	0.	0.	672.	681.	-6093.
Consumptive use deficit	0.	0.	0.	0.	0.	0.	-1263.	-2728.	-1891.	-211.	0.	0.	14775.
Actual consumptive use	132.	224.	377.	860.	2360.	4188.	3634.	1314.	544.	792.	165.	186.	2891.
Addition to ground water	0.	0.	0.	1715.	1175.	0.	0.	0.	0.	0.	0.	0.	65.
Net water surface evaporation	-2.	2.	1.	-1.	4.	11.	16.	15.	10.	5.	3.	1.	99.
M and I consumptive use	3.	5.	7.	9.	9.	10.	14.	14.	10.	7.	6.	5.	
Supply to wetland and ground water	223.	238.	356.	3535.	5993.	3546.	-142.	-326.	-90.	205.	326.	307.	14171.
Precipitation on wetland	31.	6.	31.	65.	39.	28.	9.	9.	0.	14.	19.	3.	253.
Wetland consumptive use	5.	9.	14.	21.	36.	67.	98.	99.	65.	33.	9.	9.	465.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													40642.
Consumptive use by native vegetation in addition to precipitation	120.	120.	240.	480.	960.	1630.	2520.	2520.	1680.	960.	240.	240.	11760.
Outflow plus ground water storage change	1.8.	115.	13.	3099.	5036.	1817.	-2750.	-2936.	-1835.	-774.	96.	60.	2199.
Surface outflow	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Ground water outflow	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	600.
Change in ground water storage	78.	65.	82.	3049.	4986.	1777.	-2800.	-2986.	-1885.	-824.	46.	10.	1599.

TABLE 34.--Annual water budget, Kanosh (2A-25b), Beaver River Basin

	CALENDAR YEAR 1958													
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual	
	Acre-Feet													
Tributary inflow	379.	486.	688.	1258.	6787.	1911.	682.	513.	385.	386.	332.	366.	15173.	
Diversions to cropland	284.	364.	516.	1693.	5090.	1433.	511.	385.	289.	289.	249.	274.	11380.	
30 percent to root-zone	85.	109.	155.	508.	1527.	430.	153.	115.	87.	87.	75.	82.	3414.	
Pumped irrigation water	0.	0.	0.	0.	1334.	2360.	2873.	2155.	1129.	410.	0.	0.	10261.	
41 percent to root-zone	0.	0.	0.	0.	547.	968.	1178.	884.	463.	168.	0.	0.	4207.	
Precipitation on cropland	974.	976.	872.	537.	202.	0.	29.	260.	266.	0.	572.	196.	4835.	
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
Total root-zone supply	1010.	1086.	1027.	1045.	2276.	1398.	1360.	1259.	815.	255.	647.	279.	12456.	
Potential consumptive use on irrigated land	146.	276.	270.	841.	3505.	4472.	4747.	4079.	2443.	1212.	221.	200.	22413.	
Supply minus use	863.	809.	757.	204.	-1229.	-3074.	-3387.	-2820.	-1628.	-958.	426.	79.	-9957.	
Cumulative soil moisture (maximum capacity-2,811 a.f.)	1544.	2354.	2811.	2811.	1582.	0.	0.	0.	0.	0.	426.	505.		
Consumptive use deficit	0.	0.	0.	0.	0.	-1492.	-3387.	-2820.	-1628.	-958.	0.	0.	-10285.	
Actual consumptive use	146.	276.	270.	841.	3505.	2980.	1360.	1259.	815.	255.	221.	200.	12129.	
Addition to ground water	0.	0.	299.	204.	0.	0.	0.	0.	0.	0.	0.	0.	504.	
Net water surface evaporation	-1.	-1.	2.	8.	11.	19.	24.	14.	12.	9.	4.	1.	102.	
M and I consumptive use	3.	5.	7.	9.	9.	10.	14.	14.	10.	7.	6.	5.	99.	
Supply to wetland and ground water	292.	372.	223.	1937.	4693.	484.	-688.	-514.	-186.	115.	248.	278.	7854.	
Precipitation on wetland	24.	26.	23.	14.	5.	0.	1.	7.	7.	0.	15.	5.	127.	
Wetland consumptive use	6.	11.	10.	20.	54.	71.	95.	100.	65.	39.	12.	10.	494.	
Precipitation and consumptive use on idle land, native vegetation and town and community areas														
Consumptive use by native vegetation in addition to precipitation	100.	100.	200.	400.	800.	1400.	2100.	2100.	1400.	800.	200.	200.	9800.	
20399.														
Outflow plus ground water storage change	11.	287.	636.	1531.	3844.	-987.	-2882.	-2707.	-1644.	-724.	51.	73.	-2312.	
Surface outflow	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
Ground water outflow	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	600.	
Change in ground water storage	161.	237.	536.	1481.	3794.	-1637.	-2932.	-2757.	-1694.	-774.	1.	23.	-2912.	

TABLE 35.--Annual water budget, Kanosh (2A-25b), Beaver River Basin

	CALENDAR YEAR 1959												
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Tributary inflow	323.	305.	392.	770.	1235.	535.	284.	287.	241.	261.	235.	239.	5107.
Diversions to cropland	242.	229.	294.	577.	926.	401.	213.	215.	181.	196.	176.	179.	3830.
30 percent to root-zone	73.	69.	88.	173.	278.	120.	64.	65.	54.	59.	53.	54.	1149.
Pumped irrigation water	0.	0.	0.	0.	1555.	2751.	3349.	2512.	1316.	478.	0.	0.	11961.
41 percent to root-zone	0.	0.	0.	0.	638.	1128.	1373.	1030.	540.	196.	0.	0.	4904.
Precipitation on cropland	144.	1571.	936.	803.	295.	23.	46.	780.	508.	335.	121.	751.	6314.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	217.	1640.	1024.	976.	1210.	1271.	1483.	1874.	1102.	590.	174.	805.	12367.
Potential consumptive use on irrigated land	161.	160.	343.	1106.	2468.	4732.	5156.	3895.	2113.	1047.	246.	135.	21562.
Supply minus use	56.	1480.	681.	-130.	-1258.	-3461.	-3673.	-2020.	-1011.	-457.	-72.	669.	-9195.
Cumulative soil moisture (maximum capacity-2,811 a.f.)	561.	2041.	2723.	2593.	1335.	0.	0.	0.	0.	0.	0.	669.	-9359.
Consumptive use deficit	0.	0.	0.	0.	0.	-2126.	-3673.	-2020.	-1011.	-457.	-72.	0.	12203.
Actual consumptive use	161.	160.	343.	1106.	2468.	2606.	1483.	1874.	1102.	590.	174.	135.	0.
Addition to ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	99.
Net water surface evaporation	1.	-3.	2.	6.	12.	20.	24.	15.	10.	8.	5.	-1.	99.
M and I consumptive use	3.	5.	7.	9.	9.	10.	14.	14.	10.	7.	6.	5.	99.
Supply to wetland and ground water	246.	234.	295.	581.	299.	-743.	-1191.	-837.	-373.	-8.	171.	181.	-1144.
Precipitation on wetland	4.	41.	25.	21.	8.	1.	1.	21.	13.	9.	3.	20.	166.
Wetland consumptive use	7.	6.	13.	27.	38.	76.	103.	96.	56.	34.	14.	7.	475.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													26665.
Consumptive use by native vegetation in addition to precipitation	33.	33.	66.	132.	264.	462.	693.	693.	462.	264.	66.	66.	3234.
Outflow plus ground water storage change	211.	236.	240.	444.	5.	-1280.	-1985.	-1605.	-878.	-298.	95.	128.	-4687.
Surface outflow	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Ground water outflow	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	600.
Change in ground water storage	161.	186.	190.	394.	-45.	-1330.	-2035.	-1655.	-928.	-348.	45.	78.	-5287.

TABLE 36. --Annual water budget, Kanosh (2A-25b), Beaver River Basin

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	CALENDAR YEAR 1960												
	Acre-Feet												
Tributary inflow	264.	281.	741.	2005.	3182.	1076.	449.	290.	304.	292.	275.	243.	9402.
Diversions to cropland	198.	211.	556.	1504.	2386.	807.	337.	217.	228.	219.	206.	182.	7051.
30 percent to root-zone	59.	63.	167.	451.	716.	242.	101.	65.	68.	66.	62.	55.	2115.
Pumped irrigation water	0.	0.	0.	0.	1725.	3052.	3716.	2787.	1460.	531.	0.	0.	13271.
41 percent to root-zone	0.	0.	0.	0.	707.	1251.	1524.	1143.	599.	218.	0.	0.	5441.
Precipitation on cropland	497.	861.	1329.	422.	595.	6.	12.	23.	1265.	555.	965.	266.	6794.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	556.	924.	1495.	873.	2018.	1499.	1636.	1231.	1932.	838.	1027.	320.	14350.
Potential consumptive use on irrigated land	122.	141.	413.	1090.	2725.	4640.	5391.	3870.	2658.	1077.	275.	137.	22538.
Supply minus use	434.	783.	1083.	-218.	-707.	-3140.	-3755.	-2639.	-726.	-239.	752.	184.	-8188.
Cumulative soil moisture (maximum capacity-2,811 a.f.)	1104.	1886.	2811.	2593.	1887.	0.	0.	0.	0.	0.	752.	936.	
Consumptive use deficit	0.	0.	0.	0.	0.	-1253.	-3755.	-2639.	-726.	-239.	0.	0.	-8612.
Actual consumptive use	122.	141.	413.	1090.	2725.	3386.	1636.	1231.	1932.	838.	275.	137.	13926.
Addition to ground water	0.	0.	158.	0.	0.	0.	0.	0.	0.	0.	0.	0.	158.
Net water surface evaporation	0.	0.	1.	7.	12.	21.	24.	18.	8.	7.	2.	1.	101.
M and I consumptive use	3.	5.	7.	9.	9.	10.	14.	14.	10.	7.	6.	5.	99.
Supply to wetland and ground water	202.	213.	724.	1538.	1738.	-448.	-1213.	-950.	-381.	-5.	205.	183.	1803.
Precipitation on wetland	13.	23.	35.	11.	16.	0.	0.	1.	33.	15.	25.	7.	179.
Wetland consumptive use	5.	5.	16.	26.	42.	74.	107.	95.	71.	35.	15.	7.	499.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													
Consumptive use by native vegetation in addition to precipitation													28752.
Outflow plus ground water storage change													
Surface outflow	60.	60.	120.	240.	480.	840.	1260.	1260.	840.	480.	120.	120.	5880.
Ground water outflow													
Change in ground water storage	150.	170.	623.	1282.	1232.	-1362.	-2581.	-2305.	-1259.	-506.	95.	63.	-4397.
	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	600.
	100.	120.	573.	1232.	1182.	-1412.	-2631.	-2355.	-1309.	-556.	45.	13.	-4997.

TABLE 37.--Annual water budget, Kanosh (2A-25b), Beaver River Basin

	CALENDAR YEAR 1961												Annual
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	
	Acre-Feet												
Tributary inflow	236.	240.	327.	900.	2047.	676.	405.	340.	319.	335.	368.	321.	6514.
Diversions to cropland	177.	180.	245.	675.	1535.	507.	304.	255.	239.	251.	276.	241.	4885.
30 percent to root-zone	53.	54.	74.	202.	461.	152.	91.	76.	72.	75.	83.	72.	1466.
Pumped irrigation water	0.	0.	0.	0.	1740.	3079.	3749.	2811.	1473.	536.	0.	0.	13388.
41 percent to root-zone	0.	0.	0.	0.	713.	1262.	1537.	1153.	604.	220.	0.	0.	5489.
Precipitation on cropland	329.	451.	1167.	1571.	728.	0.	508.	913.	1398.	722.	838.	399.	9023.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	382.	505.	1240.	1774.	1902.	1414.	2137.	2142.	2074.	1017.	920.	471.	15978.
Potential consumptive use on irrigated land	143.	226.	321.	898.	2805.	4779.	5156.	3858.	1898.	940.	146.	137.	21308.
Supply minus use	239.	279.	920.	876.	-904.	-3365.	-3020.	-1716.	176.	77.	774.	334.	-5330.
Cumulative soil moisture (maximum capacity-2,811 a.f.)	1175.	1453.	2373.	2811.	1907.	0.	0.	0.	176.	253.	1027.	1361.	
Consumptive use deficit	0.	0.	0.	0.	0.	-1457.	-3020.	-1716.	0.	0.	0.	0.	-6193.
Actual consumptive use	143.	226.	321.	898.	2805.	3322.	2137.	2142.	1898.	940.	146.	137.	15115.
Addition to ground water	0.	0.	0.	438.	0.	0.	0.	0.	0.	0.	0.	0.	438.
Net water surface evaporation	0.	1.	1.	3.	11.	18.	19.	9.	5.	5.	3.	0.	75.
M and I consumptive use	3.	5.	7.	9.	9.	10.	14.	14.	10.	7.	6.	5.	99.
Supply to wetland and ground water	179.	180.	245.	1124.	853.	-767.	-1256.	-912.	-372.	28.	276.	243.	-178.
Precipitation on wetland	9.	12.	31.	41.	19.	0.	13.	24.	37.	19.	22.	10.	237.
Wetland consumptive use	6.	9.	12.	22.	43.	76.	103.	95.	51.	31.	8.	7.	461.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													38068.
Consumptive use by native vegetation in addition to precipitation	42.	42.	84.	168.	336.	588.	882.	882.	588.	336.	84.	84.	4116.
Outflow plus ground water storage change	140.	141.	179.	976.	493.	-1431.	-2227.	-1865.	-974.	-320.	206.	163.	-4517.
Surface outflow	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Ground water outflow	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	600.
Change in ground water storage	90.	91.	129.	926.	443.	-1481.	-2277.	-1915.	-1024.	-370.	156.	113.	-5117.

TABLE 38.--Annual water budget, Kanosh (2A-25b), Beaver River Basin

	CALENDAR YEAR 1962													
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual	
	Acre-Feet													
Tributary inflow	329.	508.	741.	4546.	4864.	1929.	770.	456.	376.	369.	342.	280.	15510.	
Diversions to cropland	247.	381.	556.	3409.	3648.	1447.	577.	342.	282.	277.	256.	210.	11632.	
30 percent to root-zone	74.	114.	167.	1023.	1094.	434.	173.	103.	85.	83.	77.	63.	3490.	
Pumped irrigation water	0.	0.	0.	0.	1615.	2858.	3479.	2609.	1376.	497.	0.	0.	12425.	
41 percent to root-zone	0.	0.	0.	0.	662.	1172.	1426.	1070.	564.	204.	0.	0.	5094.	
Precipitation on cropland	820.	1282.	976.	947.	907.	144.	555.	23.	705.	150.	191.	555.	7256.	
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
Total root-zone supply	894.	1397.	1143.	1970.	2664.	1750.	2154.	1195.	1354.	437.	268.	618.	15840.	
Potential consumptive use on irrigated land	110.	161.	243.	1232.	2702.	4145.	4703.	3858.	2613.	1160.	350.	143.	21419.	
Supply minus use	784.	1235.	900.	738.	-38.	-2394.	-2549.	-2663.	-1259.	-723.	-82.	475.	-5579.	
Cumulative soil moisture (maximum capacity-2,811 a.f.)	2145.	2811.	2811.	2811.	2773.	378.	0.	0.	0.	0.	0.	475.		
Consumptive use deficit	0.	0.	0.	0.	0.	0.	-2171.	-2663.	-1259.	-723.	-82.	0.	-6897.	
Actual consumptive use	110.	161.	243.	1232.	2702.	4145.	2532.	1195.	1354.	437.	268.	143.	14522.	
Addition to ground water	0.	569.	900.	738.	0.	0.	0.	0.	0.	0.	0.	0.	2207.	
Net water surface evaporation	-1.	-2.	2.	5.	10.	16.	20.	19.	11.	8.	5.	0.	92.	
M and I consumptive use	3.	5.	7.	9.	9.	10.	14.	14.	10.	7.	6.	5.	99.	
Supply to wetland and ground water	253.	960.	1465.	4247.	3089.	.297.	-863.	-749.	-294.	67.	254.	212.	8942.	
Precipitation on wetland	22.	34.	26.	25.	24.	4.	15.	1.	19.	4.	5.	15.	191.	
Wetland consumptive use	4.	6.	9.	30.	41.	66.	94.	95.	70.	38.	19.	7.	479.	
Precipitation and consumptive use on idle land, native vegetation and town and community areas													30679.	
Consumptive use by native vegetation in addition to precipitation	100.	100.	200.	400.	800.	1400.	2100.	2100.	1400.	800.	200.	200.	9800.	
Outflow plus ground water storage change	170.	887.	1282.	3843.	2271.	-1165.	-3043.	-2943.	-1745.	-766.	40.	20.	-1147.	
Surface outflow	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
Ground water outflow	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	600.	
Change in ground water storage	120.	837.	1232.	3793.	2221.	-1215.	-3093.	-2993.	-1795.	-816.	-10.	-30.	-1747.	

TABLE 39.--Annual water budget, Kanosh (2A-25b), Beaver River Basin

	CALENDAR YEAR 1963												Annual
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	
	Acre-Feet												
Tributary inflow	308.	288.	314.	488.	1817.	788.	390.	362.	291.	258.	255.	216.	5775.
Diversions to cropland	231.	216.	235.	366.	1363.	591.	292.	271.	218.	193.	191.	162.	4331.
30 percent to root-zone	69.	65.	71.	110.	409.	177.	88.	81.	65.	58.	57.	49.	1299.
Pumped irrigation water	0.	0.	0.	0.	1926.	3408.	4148.	3111.	1630.	593.	0.	0.	14816.
41 percent to root-zone	0.	0.	0.	0.	790.	1397.	1701.	1276.	668.	243.	0.	0.	6075.
Precipitation on cropland	104.	560.	612.	803.	12.	942.	0.	780.	485.	266.	1438.	468.	6470.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	173.	625.	683.	913.	1210.	2516.	1788.	2137.	1219.	567.	1496.	517.	13844.
Potential consumptive use on irrigated land	110.	265.	318.	808.	3264.	3636.	5079.	3956.	2179.	1372.	253.	122.	21363.
Supply minus use	63.	360.	365.	104.	-2054.	-1120.	-3291.	-1819.	-960.	-806.	1243.	395.	-7519.
Cumulative soil moisture (maximum capacity-2,811 a.f.)	538.	897.	1262.	1366.	0.	0.	0.	0.	0.	0.	1243.	1637.	
Consumptive use deficit	0.	0.	0.	0.	-687.	-1120.	-3291.	-1819.	-960.	-806.	0.	0.	-8682.
Actual consumptive use	110.	265.	318.	808.	2576.	2516.	1788.	2137.	1219.	567.	253.	122.	12681.
Addition to ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Net water surface evaporation	1.	1.	3.	4.	15.	12.	25.	12.	8.	8.	1.	0.	90.
M and I consumptive use	3.	5.	7.	9.	9.	10.	14.	14.	10.	7.	6.	5.	99.
Supply to wetland and ground water	235.	218.	233.	365.	594.	-809.	-1437.	-1020.	-461.	-58.	191.	162.	-1788.
Precipitation on wetland	3.	15.	16.	21.	0.	25.	0.	21.	13.	7.	38.	12.	170.
Wetland consumptive use	4.	10.	12.	20.	50.	58.	101.	97.	58.	45.	14.	6.	475.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													
Consumptive use by native vegetation in addition to precipitation	37.	37.	74.	148.	296.	518.	777.	777.	518.	296.	74.	74.	3626.
Outflow plus ground water storage change	196.	185.	163.	219.	249.	-1360.	-2315.	-1874.	-1024.	-392.	141.	95.	-5719.
Surface outflow	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Ground water outflow	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	600.
Change in ground water storage	146.	135.	113.	169.	199.	-1410.	-2365.	-1924.	-1074.	-442.	91.	45.	-6319.

TABLE 41.--Annual water budget, Kanosh (2A-25b), Beaver River Basin

	CALENDAR YEAR 1965												
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Tributary inflow	410.	452.	495.	1447.	4981.	3558.	1053.	606.	491.	420.	382.	368.	14663.
Diversions to cropland	307.	339.	371.	1085.	3736.	2668.	790.	454.	368.	315.	286.	276.	10997.
30 percent to root-zone	92.	102.	111.	326.	1121.	801.	237.	136.	110.	94.	86.	83.	3299.
Pumped irrigation water	0.	0.	0.	0.	1827.	3233.	3936.	2952.	1546.	562.	0.	0.	14056.
41 percent to root-zone	0.	0.	0.	0.	749.	1326.	1614.	1210.	634.	230.	0.	0.	5763.
Precipitation on cropland	687.	959.	560.	318.	1150.	468.	607.	786.	1329.	98.	445.	884.	8290.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	780.	1061.	672.	643.	3019.	2594.	2457.	2132.	2073.	423.	531.	967.	17352.
Potential consumptive use on irrigated land	157.	165.	289.	962.	2202.	3609.	4644.	3515.	1813.	1229.	364.	152.	19100.
Supply minus use	623.	896.	383.	-319.	817.	-1015.	-2187.	-1382.	260.	-805.	166.	815.	-1748.
Cumulative soil moisture (maximum capacity-2,811 a.f.)	2631.	2811.	2811.	2492.	2811.	1796.	0.	0.	260.	0.	166.	981.	
Consumptive use deficit	0.	0.	0.	0.	0.	0.	-390.	-1382.	0.	-546.	0.	0.	-2318.
Actual consumptive use	157.	165.	289.	962.	2202.	3609.	4254.	2132.	1813.	683.	364.	152.	16781.
Addition to ground water	0.	716.	383.	0.	499.	0.	0.	0.	0.	0.	0.	0.	1598.
Net water surface evaporation	-1.	-1.	3.	5.	7.	13.	16.	11.	3.	8.	4.	-1.	68.
M and I consumptive use	3.	5.	7.	9.	9.	10.	14.	14.	10.	7.	6.	5.	99.
Supply to wetland and ground water	315.	1062.	756.	1108.	3594.	1409.	-828.	-766.	-267.	80.	286.	281.	7031.
Precipitation on wetland	18.	25.	15.	8.	30.	12.	16.	21.	35.	3.	12.	23.	218.
Wetland consumptive use	6.	6.	11.	23.	34.	58.	93.	86.	48.	40.	20.	7.	433.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													35018.
Consumptive use by native vegetation in addition to precipitation	95.	95.	190.	380.	760.	1330.	1995.	1995.	1330.	760.	190.	190.	9310.
Outflow plus ground water storage change	232.	986.	570.	713.	2830.	34.	-2900.	-2827.	-1610.	-717.	88.	107.	-2494.
Surface outflow	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Ground water outflow	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	50.	600.
Change in ground water storage	182.	936.	520.	663.	2780.	-16.	-2950.	-2877.	-1660.	-767.	38.	57.	-3094.

TABLE 42.--Representative potential consumptive use (calendar year 1961), Beaver-Greenville (12-1), Beaver River Basin

Land use	Acres	MONTHLY CONSUMPTIVE USE, Inches												Annual Use	
		Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Inches	Acres-Feet
		Irrigated Cropland													
Alfalfa	4,712	.24	.29	.46	.79	3.49	6.71	7.58	6.51	3.23	.76	.28	.24	30.59	12,011
Alfalfa W2	800	.34	.39	.61	1.25	3.49	6.71	7.58	6.51	3.23	1.53	.54	.41	32.59	2,173
Small grain	616	.15	.18	.29	.67	2.91	6.95	6.14	2.21	.82	.47	.18	.15	21.13	1,085
Corn	94	.15	.18	.29	.49	1.33	3.56	6.42	6.57	2.12	.47	.18	.15	21.92	172
Orchards	19	.24	.29	.46	.79	3.60	6.71	7.58	6.51	3.17	.76	.28	.24	30.63	48
Hayland	702	.24	.29	.46	1.25	3.24	5.47	6.21	5.34	2.48	.76	.28	.24	26.26	1,536
Pasture W1	379	.24	.29	.46	1.25	3.24	5.47	6.21	5.34	2.48	.76	.28	.24	26.26	829
Pasture W2	1,238	.34	.39	.61	1.25	3.24	5.47	6.21	5.34	2.71	1.53	.54	.41	28.04	2,893
Pasture W3	2,476	.52	.62	1.00	1.78	3.60	6.83	8.47	7.92	4.18	2.31	.81	.60	38.63	7,970
Suburban crops	675	.24	.29	.46	1.25	3.24	5.47	6.21	5.34	2.48	.76	.28	.24	26.26	1,536
Total use	11,711	.31	.36	.57	1.11	3.32	6.25	7.15	6.13	3.05	1.18	.42	.33	30.19 ^a	30,195
Wetlands (Phreatophytes)															
Sage and rabbit-brush W2	253	.23	.28	.52	.93	1.91	4.93	7.51	7.98	4.41	2.18	.57	.26	31.70	668
Sage and rabbit-brush W3	661	.42	.53	.79	1.78	4.14	10.69	15.36	15.23	7.73	3.60	.88	.48	61.63	3,395
Willows W2	878	.40	.56	1.31	2.71	5.11	8.50	9.69	8.53	4.47	2.39	.72	.46	44.81	3,283
Total use	1,792	.38	.51	.99	2.09	4.24	8.68	11.31	10.76	5.58	2.76	.75	.44	48.46 ^a	7,346
Consumptive Use of Precipitation															
Idle land	2,480													11.49	2,374
Native vegetation	23,496													11.49	22,497
Town and community area	855													11.49	819
Water Surface Evaporation															
Net evaporation	167	.01	1.28	1.25	1.78	5.85	7.95	8.02	9.15	8.37	3.87	2.62	.52	41.10	548
GRAND TOTAL	40,494													18.90 ^a	63,778

^aWeighted value.

TABLE 43.--Annual water budget, Beaver-Greenville (2B-1), Beaver River Basin

	CALENDAR YEAR 1956												
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Ground water tributary inflow	334.	334.	333.	333.	333.	333.	333.	333.	333.	333.	334.	334.	4000.
Surface tributary inflow	1485.	1433.	1946.	3336.	10520.	8698.	4635.	2272.	1489.	1499.	1439.	1429.	40181.
Diversions to cropland	925.	894.	1202.	3140.	10420.	8614.	4590.	2021.	1190.	934.	898.	890.	35718.
25 percent to root-zone	231.	223.	300.	785.	2605.	2154.	1148.	505.	297.	233.	224.	223.	8929.
Pumped irrigation water	0.	0.	0.	0.	0.	328.	832.	806.	554.	0.	0.	0.	2520.
30 percent to root-zone	0.	0.	0.	0.	0.	98.	250.	242.	166.	0.	0.	0.	756.
Precipitation on cropland	993.	440.	75.	834.	843.	468.	806.	281.	103.	337.	0.	272.	5453.
Direct use ground water	154.	194.	330.	676.	1345.	2246.	2573.	2207.	1158.	597.	225.	166.	11871.
Total root-zone supply	1378.	858.	705.	2295.	4793.	4966.	4776.	3235.	1725.	1168.	449.	660.	27009.
Potential consumptive use on irrigated cropland	405.	242.	646.	1186.	3729.	6433.	6987.	5943.	4379.	1436.	419.	331.	32137.
Supply minus use	973.	616.	59.	1109.	1064.	-1467.	-2212.	-2708.	-2655.	-269.	31.	329.	-5128.
Cumulative soil moisture (maximum capacity-4,466 a.f.)	2101.	2718.	2777.	3885.	4466.	2999.	788.	0.	0.	0.	31.	360.	
Consumptive use deficit	0.	0.	0.	0.	0.	0.	0.	-1920.	-2655.	-269.	0.	0.	-4843.
Actual consumptive use	405.	242.	646.	1186.	3729.	6433.	6987.	4023.	1725.	1168.	419.	331.	27293.
Addition to ground water	0.	0.	0.	0.	484.	0.	0.	0.	0.	0.	0.	0.	484.
Net water surface evaporation	-3.	11.	34.	47.	83.	111.	111.	118.	101.	53.	42.	8.	717.
M and I consumptive use	18.	22.	31.	40.	40.	44.	62.	62.	44.	31.	26.	22.	442.
Supply to wetland and ground water	1417.	1316.	1584.	2121.	7264.	4378.	825.	-530.	55.	917.	1256.	1342.	21947.
Precipitation on wetland	152.	67.	11.	128.	129.	72.	123.	43.	16.	52.	0.	42.	834.
Wetland consumptive use	75.	52.	169.	337.	721.	1353.	1674.	1581.	1214.	512.	112.	65.	7865.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													12487.
Consumptive use by native vegetation in addition to precipitation	14.	14.	28.	56.	112.	196.	294.	294.	196.	112.	28.	28.	1372.
Outflow plus ground water storage change	1480.	1317.	1398.	1856.	6560.	2901.	-1019.	-2362.	-1339.	345.	1116.	1290.	13544.
Beaver River outflow to Minersville Reservoir	2180.	1780.	1970.	208.	83.	26.	0.	0.	0.	0.	1960.	1950.	10160.
Ground water outflow	109.	109.	108.	108.	108.	108.	108.	108.	108.	108.	109.	109.	1300.
Change in ground water storage	-809.	-572.	-680.	1540.	6369.	2767.	-1123.	-2470.	-1447.	231.	-953.	-769.	2084.

TABLE 44. Annual water budget, Beaver-Greenville (2B-1), Beaver River Basin

	CALENDAR YEAR 1957												
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Ground water tributary inflow	334.	334.	333.	333.	333.	333.	333.	333.	333.	333.	334.	334.	4000.
Surface tributary inflow	1349.	1312.	1501.	3215.	11581.	35800.	12164.	5717.	2368.	2428.	2128.	2168.	81729.
Diversions to cropland	913.	891.	1004.	2932.	11471.	29323.	12044.	5667.	2097.	1561.	1381.	1405.	70689.
25 percent to root-zone	228.	223.	251.	733.	2868.	7331.	3011.	1417.	524.	390.	345.	351.	17672.
Pumped irrigation water	0.	0.	0.	0.	0.	343.	871.	845.	581.	0.	0.	0.	2640.
30 percent to root-zone	0.	0.	0.	0.	0.	103.	261.	253.	174.	0.	0.	0.	792.
Precipitation on cropland	2108.	609.	1190.	2249.	2370.	853.	796.	778.	0.	2417.	1227.	422.	15018.
Direct use ground water	154.	194.	330.	676.	1345.	2246.	2573.	2207.	1158.	597.	225.	166.	11871.
Total root-zone supply	2490.	1026.	1771.	3657.	6583.	10532.	6642.	4655.	1856.	3404.	1797.	939.	45354.
Potential consumptive use on irrigated cropland	293.	492.	743.	1186.	2815.	5345.	6751.	5819.	3387.	1320.	404.	381.	28936.
Supply minus use	2198.	534.	1028.	2471.	3768.	5187.	-110.	-1164.	-1530.	2084.	1394.	557.	16417.
Cumulative soil moisture (maximum capacity-4,466 a.f.)	2557.	3091.	4119.	4466.	4466.	4466.	4356.	3192.	1662.	3745.	4466.	4466.	
Consumptive use deficit	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Actual consumptive use	293.	492.	743.	1186.	2815.	5345.	6751.	5819.	3387.	1320.	404.	381.	28936.
Addition to ground water	0.	0.	0.	2124.	3768.	5187.	0.	0.	0.	0.	673.	557.	12311.
Net water surface evaporation	-18.	9.	19.	22.	29.	71.	98.	101.	73.	12.	25.	6.	446.
M and I consumptive use	18.	22.	31.	40.	40.	44.	62.	62.	44.	31.	26.	22.	442.
Supply to wetland and ground water	1301.	1199.	1203.	4201.	11401.	31526.	6492.	2010.	728.	1731.	2514.	2514.	66816.
Precipitation on wetland	323.	93.	182.	344.	363.	130.	120.	119.	0.	370.	188.	65.	2298.
Wetland consumptive use	54.	105.	194.	337.	544.	1124.	1617.	1548.	939.	471.	108.	75.	7117.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													34405.
Consumptive use by native vegetation in addition to precipitation	28.	28.	56.	112.	224.	392.	588.	588.	392.	224.	56.	56.	2744.
Outflow plus ground water storage change													
Beaver River outflow to Minersville Reservoir	1543.	1159.	1135.	4096.	10995.	30140.	4409.	-3.	-603.	1406.	2538.	2447.	59253.
Ground water outflow	2040.	2440.	1980.	721.	1500.	19320.	1750.	981.	885.	2230.	4100.	3140.	41090.
	109.	109.	108.	108.	108.	108.	108.	108.	108.	108.	109.	109.	1300.
Change in ground water storage	-608.	-1390.	-953.	3267.	9387.	10712.	2551.	-1092.	-1596.	-932.	-1671.	-802.	16863.

TABLE 45. --Annual water budget, Beaver-Greenville (2B-1), Beaver River Basin

	CALENDAR YEAR 1958												Annual
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	
	Acre-Feet												
Ground water tributary inflow	334.	334.	333.	393.	333.	333.	333.	333.	333.	333.	334.	334.	4000.
Surface tributary inflow	1155.	1385.	1817.	5410.	26384.	20167.	11008.	3647.	3135.	2443.	1887.	1697.	80131.
Diversions to cropland	1093.	1051.	1310.	5351.	23783.	19967.	10908.	3611.	3105.	2419.	1352.	1238.	75192.
25 percent to root-zone	273.	263.	327.	1338.	5946.	4992.	2727.	903.	776.	605.	338.	309.	18798.
Pumped irrigation water	0.	0.	0.	0.	0.	359.	911.	883.	607.	0.	0.	0.	2760.
30 percent to root-zone	0.	0.	0.	0.	0.	108.	273.	265.	182.	0.	0.	0.	828.
Precipitation on cropland	656.	1349.	1649.	497.	909.	0.	19.	1836.	665.	187.	375.	0.	8141.
Direct use ground water	154.	194.	330.	676.	1345.	2246.	2573.	2207.	1158.	597.	225.	166.	11871.
Total root-zone supply	1083.	1806.	2306.	2510.	8200.	7345.	5592.	5211.	2782.	1389.	938.	475.	39638.
Potential consumptive use on irrigated cropland	309.	492.	442.	1021.	3761.	5704.	6565.	6365.	3739.	1488.	561.	421.	30868.
Supply minus use	774.	1314.	1864.	1490.	4438.	1642.	-973.	-1154.	-957.	-99.	377.	55.	8771.
Cumulative soil moisture (maximum capacity-4,466 a.f.)	4466.	4466.	4466.	4466.	4466.	4466.	3493.	2339.	1381.	1282.	1659.	1714.	
Consumptive use deficit	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Actual consumptive use	309.	492.	442.	1021.	3761.	5704.	6565.	6365.	3739.	1488.	561.	421.	30868.
Addition to ground water	774.	1314.	1864.	1490.	4438.	1642.	0.	0.	0.	0.	0.	0.	11522.
Net water surface evaporation	2.	-2.	12.	61.	69.	111.	152.	78.	79.	60.	37.	12.	671.
M and I consumptive use	18.	22.	31.	40.	40.	44.	62.	62.	44.	31.	26.	22.	442.
Supply to wetland and ground water	1816.	2556.	3313.	5118.	23755.	14642.	5553.	466.	1228.	1483.	1595.	1521.	63042.
Precipitation on wetland	100.	206.	252.	76.	139.	0.	3.	281.	102.	29.	57.	0.	1246.
Wetland consumptive use	57.	105.	116.	290.	727.	1199.	1572.	1694.	1037.	530.	150.	83.	7561.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													18656.
Consumptive use by native vegetation in addition to precipitation	27.	27.	54.	108.	216.	378.	567.	567.	378.	216.	54.	54.	2646.
Outflow plus ground water storage change	1832.	2630.	3396.	4796.	22956.	13064.	3417.	-1514.	-85.	765.	1449.	1385.	54081.
Beaver River outflow to Minersville Reservoir	2620.	3330.	3400.	4210.	11900.	4940.	351.	834.	1190.	1470.	3110.	2740.	40100.
Ground water outflow	109.	109.	108.	108.	108.	108.	108.	108.	108.	168.	109.	109.	1300.
Change in ground water storage	-897.	-809.	-112.	478.	10943.	7916.	2958.	-2456.	-1383.	-813.	-1770.	-1364.	12681.

TABLE 46 .--Annual water budget, Beaver-Greenville (2B-1), Beaver River Basin:

	CALENDAR YEAR 1959												
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Ground water tributary inflow	334.	334.	333.	333.	333.	333.	333.	333.	333.	333.	334.	334.	4000.
Surface tributary inflow	1650.	1467.	1760.	2836.	3649.	2523.	1530.	1488.	1164.	2158.	1099.	1121.	21540.
Diversions to cropland	1000.	890.	1066.	2760.	3640.	2507.	1515.	1474.	1153.	1162.	669.	682.	18518.
25 percent to root-zone	250.	222.	266.	690.	910.	627.	379.	368.	288.	291.	167.	171.	4629.
Pumped irrigation water	0.	0.	0.	0.	0.	382.	970.	941.	647.	0.	0.	0.	2940.
30 percent to root-zone	0.	0.	0.	0.	0.	115.	291.	282.	194.	0.	0.	0.	882.
Precipitation on cropland	244.	1743.	28.	468.	272.	94.	534.	815.	731.	272.	150.	600.	5949.
Direct use ground water	154.	194.	330.	676.	1345.	2246.	2573.	2207.	1158.	597.	225.	166.	11871.
Total root-zone supply	647.	2159.	625.	1834.	2527.	3081.	3777.	3673.	2371.	1159.	542.	936.	23332.
Potential consumptive use on irrigated cropland	345.	328.	591.	1291.	3106.	6275.	7719.	6237.	3459.	1335.	518.	333.	31537.
Supply minus use	302.	1831.	33.	543.	-579.	-3194.	-3943.	-2564.	-1088.	-175.	24.	603.	-8205.
Cumulative soil moisture (maximum capacity-4,466 a.f.)	2016.	3848.	3881.	4424.	3845.	652.	0.	0.	0.	0.	24.	627.	
Consumptive use deficit	0.	0.	0.	0.	0.	0.	-3291.	-2564.	-1088.	-175.	0.	0.	-7118.
Actual consumptive use	345.	328.	591.	1291.	3106.	6275.	4428.	3673.	2371.	1159.	518.	333.	24419.
Addition to ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Net water surface evaporation	7.	-7.	35.	62.	84.	114.	144.	112.	73.	58.	40.	4.	723.
M and I consumptive use	18.	22.	31.	40.	40.	44.	62.	62.	44.	31.	26.	22.	442.
Supply to wetland and ground water	1555.	1370.	1431.	1701.	1603.	-289.	-1585.	-1211.	-260.	615.	975.	1093.	6992.
Precipitation on wetland	37.	267.	4.	72.	42.	14.	82.	125.	112.	42.	23.	92.	910.
Wetland consumptive use	64.	70.	155.	367.	601.	1319.	1849.	1659.	959.	476.	139.	66.	7724.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													13624.
Consumptive use by native vegetation in addition to precipitation	7.	7.	14.	28.	56.	98.	147.	147.	98.	56.	14.	14.	686.
Outflow plus ground water storage change													
Beaver River outflow to Minersville Reservoir	1521.	1559.	1267.	1378.	988.	-1692.	-3499.	-2892.	-1205.	125.	845.	1105.	-507.
Ground water outflow	2470.	2810.	2650.	346.	36.	4.	0.	9.	0.	2.	1300.	1630.	11257.
	109.	109.	108.	108.	108.	108.	108.	108.	108.	108.	109.	109.	1300.
Change in ground water storage	-1058.	-1360.	-1491.	924.	844.	-1804.	-3607.	-3009.	-1313.	15.	-564.	-632.	-13064.

TABLE 47. --Annual water budget, Beaver-Greenville (2B-1), Beaver River Basin

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
Ground water tributary inflow	334.	334.	333.	333.	333.	333.	333.	333.	333.	333.	334.	334.	4000.
Surface tributary inflow	1210.	1195.	1606.	4112.	8484.	4349.	1756.	1164.	1397.	1374.	1304.	1190.	29138.
Diversions to cropland	761.	752.	998.	4071.	8266.	4162.	1749.	1126.	1384.	1244.	841.	749.	26104.
25 percent to root-zone	190.	188.	250.	1018.	2067.	1041.	437.	282.	346.	311.	210.	187.	6526.
Pumped irrigation water	0.	0.	0.	0.	0.	382.	970.	941.	647.	0.	0.	0.	2940.
30 percent to root-zone	0.	0.	0.	0.	0.	115.	291.	282.	194.	0.	0.	0.	882.
Precipitation on cropland	375.	656.	834.	703.	562.	122.	393.	47.	2286.	1237.	1246.	141.	8601.
Direct use ground water	154.	194.	330.	676.	1345.	2246.	2573.	2207.	1158.	597.	225.	166.	11871.
Total root-zone supply	719.	1038.	1413.	2396.	3974.	3523.	3695.	2818.	3984.	2145.	1681.	494.	27880.
Potential consumptive use on irrigated cropland	283.	300.	763.	1298.	3411.	6074.	7349.	6110.	4171.	1285.	628.	336.	32008.
Supply minus use	436.	737.	650.	1098.	563.	-2551.	-3654.	-3292.	-187.	860.	1054.	158.	-4129.
Cumulative soil moisture (maximum capacity-4,466 a.f.)	1063.	1800.	2450.	3548.	4111.	1560.	0.	0.	0.	860.	1913.	2071.	
Consumptive use deficit	0.	0.	0.	0.	0.	0.	-2094.	-3292.	-187.	0.	0.	0.	-5573.
Actual consumptive use	283.	300.	763.	1298.	3411.	6074.	5255.	2818.	3984.	1285.	628.	336.	26435.
Addition to ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Net water surface evaporation	6.	8.	24.	56.	86.	121.	142.	129.	54.	46.	25.	10.	706.
M and I consumptive use	18.	22.	31.	40.	40.	44.	62.	62.	44.	31.	26.	22.	442.
Supply to wetland and ground water	1176.	1017.	1305.	2656.	5275.	1116.	-1476.	-1465.	-67.	722.	1152.	1139.	12711.
Precipitation on wetland	57.	100.	128.	108.	86.	19.	60.	7.	350.	189.	191.	22.	1316.
Wetland consumptive use	52.	64.	200.	369.	660.	1277.	1760.	1626.	1156.	458.	168.	66.	7857.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													
Consumptive use by native vegetation in addition to precipitation	10.	10.	20.	40.	80.	140.	210.	210.	140.	80.	20.	20.	980.
Outflow plus ground water storage change	1171.	1143.	1213.	2354.	4626.	-283.	-3326.	-3293.	-1013.	374.	1157.	1074.	5191.
Beaver River outflow to Minersville Reservoir	1790.	2010.	2270.	139.	47.	24.	0.	0.	105.	61.	1580.	1710.	9740.
Ground water outflow	109.	109.	108.	108.	108.	108.	108.	108.	108.	108.	109.	109.	1300.
Change in ground water storage	-728.	-976.	-1165.	2107.	-4471.	-415.	-3434.	-3401.	-1226.	205.	-532.	-745.	-5849.

TABLE 48.--Annual water budget, Beaver-Greenville (2B-1), Beaver River Basin

	CALENDAR YEAR 1961												
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Ground water tributary inflow	334.	334.	333.	333.	333.	333.	333.	333.	333.	333.	334.	334.	4000.
Surface tributary inflow	1049.	1025.	1416.	3319.	7339.	4240.	1476.	1643.	1811.	1543.	1320.	1336.	27518.
Diversions to cropland	655.	640.	875.	3289.	7268.	4199.	1424.	1628.	1677.	1390.	817.	827.	24689.
25 percent to root-zone	164.	160.	219.	822.	1817.	1050.	356.	407.	419.	347.	204.	207.	6172.
Pumped irrigation water	0.	0.	0.	0.	0.	335.	851.	826.	568.	0.	0.	0.	2580.
30 percent to root-zone	0.	0.	0.	0.	0.	100.	255.	248.	170.	0.	0.	0.	774.
Precipitation on cropland	740.	0.	1330.	1536.	1087.	0.	1274.	2436.	1799.	141.	525.	347.	11214.
Direct use ground water	154.	194.	330.	676.	1345.	2246.	2573.	2207.	1158.	597.	225.	166.	11871.
Total root-zone supply	1058.	354.	1879.	3035.	4249.	3396.	4458.	5298.	3546.	1085.	954.	719.	30032.
Potential consumptive use on irrigated cropland	307.	362.	573.	1112.	3318.	6252.	7155.	6131.	3052.	1175.	424.	333.	30195.
Supply minus use	751.	-8.	1306.	1923.	931.	-2856.	-2697.	-833.	495.	-90.	530.	386.	-163.
Cumulative soil moisture (maximum capacity-4,466 a.f.)	2822.	2814.	4120.	4466.	4466.	1610.	0.	0.	495.	404.	934.	1320.	
Consumptive use deficit	0.	0.	0.	0.	0.	0.	-1087.	-833.	0.	0.	0.	0.	-1920.
Actual consumptive use	307.	362.	573.	1112.	3318.	6252.	6069.	5298.	3052.	1175.	424.	333.	28275.
Addition to ground water	0.	0.	0.	1577.	931.	0.	0.	0.	0.	0.	0.	0.	2508.
Net water surface evaporation	1.	17.	17.	37.	78.	106.	107.	50.	45.	49.	35.	7.	548.
M and I consumptive use	18.	22.	31.	40.	40.	44.	62.	62.	44.	31.	26.	22.	442.
Supply to wetland and ground water	1047.	966.	1152.	3653.	5323.	1027.	-1544.	-997.	307.	851.	1164.	1268.	14219.
Precipitation on wetland	113.	0.	204.	235.	166.	0.	195.	373.	275.	22.	80.	53.	1716.
Wetland consumptive use	57.	78.	150.	316.	642.	1315.	1714.	1631.	846.	419.	113.	66.	7346.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													25690.
Consumptive use by native vegetation in addition to precipitation	9.	9.	18.	36.	72.	126.	189.	189.	126.	72.	18.	18.	882.
Outflow plus ground water storage change	1094.	879.	1188.	3537.	4776.	-414.	-3552.	-2445.	-390.	382.	1113.	1237.	7707.
Beaver River outflow to Minersville Reservoir	1460.	1270.	1780.	517.	128.	3.	3.	40.	160.	323.	1630.	1870.	9180.
Ground water outflow	109.	109.	108.	108.	108.	108.	108.	108.	108.	108.	108.	108.	1300.
Change in ground water storage	-475	-500	-700	2912.	4540.	-525.	-3363.	-2593.	-658.	-49.	-625	-741.	-2773.

TABLE 49.--Annual water budget, Beaver-Greenville (2B-1), Beaver River Basin

CALENDAR YEAR 1962													
Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual	
Acre-Feet													
Ground water tributary inflow	334.	334.	333.	333.	333.	333.	333.	333.	333.	334.	334.	334.	4000.
Surface tributary inflow	906.	779.	987.	7537.	12869.	11969.	7701.	3139.	1879.	1025.	1000.	1000.	51712.
Diversions to cropland	838.	717.	906.	7530.	12749.	11869.	7625.	3108.	1798.	956.	902.	902.	50807.
25 percent to root-zone	210.	179.	226.	1882.	3187.	2967.	1906.	777.	450.	239.	226.	226.	12702.
Pumped irrigation water	0.	0.	0.	0.	0.	335.	851.	826.	568.	0.	0.	0.	2580.
30 percent to root-zone	0.	0.	0.	0.	0.	100.	255.	248.	170.	0.	0.	0.	774.
Precipitation on cropland	768.	2361.	1190.	393.	1490.	290.	225.	169.	1284.	122.	0.	0.	8957.
Direct use ground water	154.	194.	330.	676.	1345.	2246.	2573.	2207.	1158.	225.	166.	166.	11871.
Total root-zone supply	1132.	2734.	1746.	2952.	6022.	5604.	4960.	3400.	3062.	586.	392.	392.	34303.
Potential consumptive use on irrigated cropland	259.	362.	423.	1386.	2915.	5078.	6405.	5615.	3860.	737.	361.	361.	28935.
Supply minus use	872.	2372.	1324.	1566.	3107.	526.	-1445.	-2215.	-798.	-151.	31.	31.	5369.
Cumulative soil moisture (maximum capacity-4,466 a.f.)	2193.	4466.	4466.	4466.	4466.	4466.	3021.	806.	7.	37.	67.	67.	0.
Consumptive use deficit	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Actual consumptive use	259.	362.	423.	1386.	2915.	5078.	6405.	5615.	3860.	737.	361.	361.	28935.
Addition to ground water	0.	99.	1324.	1566.	3107.	526.	0.	0.	0.	0.	0.	0.	6621.
Net water surface evaporation	0.	-15.	19.	52.	65.	93.	133.	131.	79.	40.	12.	12.	658.
M and I consumptive use	18.	22.	31.	40.	40.	44.	62.	62.	44.	26.	22.	22.	442.
Supply to wetland and ground water	858.	832.	2037.	6786.	11671.	7378.	3105.	47.	311.	829.	908.	908.	35886.
Precipitation on wetland	118.	361.	182.	60.	228.	44.	34.	26.	196.	19.	0.	0.	1371.
Wetland consumptive use	48.	78.	111.	394.	564.	1068.	1534.	1494.	1070.	197.	71.	71.	7175.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													20526.
Consumptive use by native vegetation in addition to precipitation	18.	18.	36.	72.	144.	252.	378.	378.	252.	36.	36.	36.	1764.
Outflow plus ground water storage change	910.	1097.	2073.	6380.	11191.	6103.	1227.	-1799.	-814.	614.	801.	801.	28318.
Beaver River outflow to Minersville Reservoir	1710.	1980.	2150.	760.	1700.	1230.	374.	90.	204.	2030.	2010.	2010.	15000.
Ground water outflow	109.	109.	108.	108.	108.	108.	108.	108.	108.	109.	109.	109.	1300.
Change in ground water storage	-909.	-992.	-185.	5512.	9383.	4765.	745.	-1997.	-1126.	-1525.	-1318.	-1318.	12018.

TABLE 50.--Annual water budget, Beaver-Greenville (2B-1), Beaver River Basin

	CALENDAR YEAR 1963												
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Ground water tributary inflow	334.	334.	333.	333.	333.	333.	333.	333.	333.	333.	334.	334.	400.
Surface tributary inflow	1015.	1333.	2178.	9132.	5528.	1994.	2084.	1686.	1251.	1057.	925.	1247.	29462.
Diversions to cropland	712.	872.	903.	2158.	9042.	5474.	1987.	2022.	1670.	1201.	857.	748.	27645.
25 percent to root-zone	178.	218.	226.	539.	2260.	1369.	497.	505.	417.	300.	214.	187.	6911.
Pumped irrigation water	0.	0.	0.	0.	0.	343.	871.	845.	581.	0.	0.	0.	2640.
30 percent to root-zone	0.	0.	0.	0.	0.	103.	261.	253.	174.	0.	0.	0.	792.
Precipitation on cropland	187.	1424.	581.	956.	56.	1134.	169.	2408.	1593.	66.	1152.	141.	9865.
Direct use ground water	154.	194.	330.	676.	1345.	2246.	2573.	2207.	1158.	597.	225.	166.	11871.
Total root-zone supply	519.	1836.	1137.	2171.	3662.	4851.	3500.	5374.	3342.	963.	1592.	494.	29440.
Potential consumptive use on irrigated cropland	266.	438.	487.	976.	3910.	4719.	7035.	6005.	4045.	1811.	646.	315.	30655.
Supply minus use	254.	1398.	649.	1195.	-248.	132.	-3536.	-632.	-703.	-849.	946.	178.	-1215.
Cumulative soil moisture (maximum capacity-4,466 a.f.)	321.	1719.	2368.	3563.	3315.	3447.	0.	0.	0.	0.	946.	1124.	
Consumptive use deficit	0.	0.	0.	0.	0.	0.	-89.	-632.	-703.	-849.	0.	0.	-2272.
Actual consumptive use	266.	438.	487.	976.	3910.	4719.	6946.	5374.	3342.	963.	646.	315.	28383.
Addition to ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Net water surface evaporation	8.	-3.	27.	37.	103.	75.	152.	65.	48.	61.	26.	10.	610.
M and I consumptive use	18.	22.	31.	40.	40.	44.	62.	62.	44.	31.	26.	22.	442.
Supply to wetland and ground water	991.	1184.	1052.	1219.	5716.	2024.	-1218.	-676.	177.	595.	900.	874.	12836.
Precipitation on wetland	29.	218.	89.	146.	9.	173.	26.	368.	244.	10.	176.	22.	1510.
Wetland consumptive use	49.	94.	127.	277.	756.	992.	1685.	1598.	1121.	646.	173.	62.	7581.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													
Consumptive use by native vegetation in addition to precipitation													22605.
Outflow plus ground water storage change	10.	10.	20.	40.	80.	140.	210.	210.	140.	80.	20.	20.	980.
Beaver River outflow to Minersville Reservoir	690.	1298.	994.	1048.	4889.	1065.	-3087.	-2115.	-841.	-121.	883.	813.	5784.
Ground water outflow	1960.	2350.	2120.	376.	38.	247.	0.	131.	309.	345.	1970.	1880.	11730.
	109.	109.	108.	108.	108.	108.	108.	108.	108.	108.	109.	109.	1300.
Change in ground water storage	-1109.	-1161.	-1234.	564.	4743.	710.	-3195.	-2354.	-1258.	-574.	-1196.	-1176.	-7246.

TABLE 51.--Annual water budget, Beaver-Greenville (2B-1), Beaver River Basin

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Ground water tributary inflow	334.	334.	333.	333.	333.	333.	333.	333.	333.	333.	334.	334.	4000.
Surface tributary inflow	1069.	939.	1101.	2488.	11136.	8807.	5408.	2241.	1488.	1477.	1322.	1338.	38810.
Diversions to cropland	718.	664.	737.	2487.	11136.	8720.	5355.	2239.	1484.	1442.	881.	879.	36740.
25 percent to root-zone	179.	166.	184.	622.	2784.	2180.	1339.	560.	371.	361.	220.	220.	9185.
Pumped irrigation water	0.	0.	0.	0.	0.	351.	891.	864.	594.	0.	0.	0.	2700.
30 percent to root-zone	0.	0.	0.	0.	0.	105.	267.	259.	178.	0.	0.	0.	810.
Precipitation on cropland	66.	1152.	141.	94.	9.	656.	2314.	1227.	628.	244.	1771.	928.	9228.
Direct use ground water	154.	194.	330.	676.	1345.	2246.	2573.	2207.	1158.	597.	225.	166.	11871.
Total root-zone supply	399.	1512.	655.	1391.	4138.	5187.	6493.	4253.	2335.	1201.	2216.	1313.	31094.
Potential consumptive use on irrigated cropland	277.	271.	408.	1014.	3076.	5098.	7325.	5778.	3259.	1564.	416.	364.	28841.
Supply minus use	122.	1241.	246.	377.	1062.	89.	-832.	-1525.	-924.	-363.	1800.	959.	2253.
Cumulative soil moisture (maximum capacity-4,466 a.f.)	1246.	2488.	2734.	3111.	4173.	4262.	3431.	1906.	981.	618.	2418.	3377.	
Consumptive use deficit	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Actual consumptive use	277.	271.	408.	1014.	3076.	5098.	7325.	5778.	3259.	1564.	416.	354.	28841.
Addition to ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Net water surface evaporation	10.	1.	33.	45.	79.	75.	105.	89.	65.	55.	18.	-1.	574.
M and I consumptive use	18.	22.	31.	40.	40.	44.	62.	62.	44.	31.	26.	22.	442.
Supply to wetland and ground water	1042.	890.	856.	1439.	7221.	4490.	1395.	-603.	04.	466.	1167.	1265.	19928.
Precipitation on wetland	10.	176.	22.	14.	1.	100.	354.	188.	96.	37.	271.	142.	1412.
Wetland consumptive use	51.	88.	107.	288.	595.	1072.	1754.	1537.	904.	598.	111.	70.	7105.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													2140.
Consumptive use by native vegetation in addition to precipitation	13.	13.	26.	52.	104.	182.	273.	273.	182.	104.	26.	26.	1274.
Outflow plus ground water storage change	987.	995.	744.	1113.	6524.	3336.	-278.	-2225.	-985.	142.	1301.	1311.	12961.
Beaver River outflow to Minersville Reservoir	1850.	1750.	2070.	922.	1460.	154.	217.	128.	10.	141.	1910.	2550.	13160.
Ground water outflow	109.	109.	108.	108.	108.	108.	108.	108.	108.	108.	109.	109.	1300.
Change in ground water storage	-972.	-864.	-1433.	83.	4956.	-3074.	-603.	-2461.	-1103.	-107.	-718.	-1348.	-1499.

TABLE 52.--Annual water budget, Beaver-Greenville (2B-1), Beaver River Basin

CALENDAR YEAR 1965

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Ground water tributary inflow	334.	334.	333.	333.	333.	333.	333.	333.	333.	333.	334.	334.	4000.
Surface tributary inflow	915.	731.	922.	2725.	9006.	14606.	9715.	6482.	3566.	2778.	1230.	1082.	53762.
Diversions to cropland	884.	706.	890.	2692.	9337.	15245.	10405.	6899.	3609.	2837.	1192.	1024.	55720.
25 percent to root-zone	221.	177.	222.	673.	2334.	3811.	2601.	1725.	902.	709.	298.	256.	13930.
Pumped irrigation water	0.	0.	0.	0.	0.	351.	891.	864.	594.	0.	0.	0.	2700.
30 percent to root-zone	0.	0.	0.	0.	0.	105.	267.	259.	178.	0.	0.	0.	810.
Precipitation on cropland	0.	1012.	1405.	393.	497.	937.	1087.	1855.	525.	899.	1124.	1565.	11299.
Direct use ground water	154.	194.	330.	676.	1345.	2246.	2573.	2207.	1158.	597.	225.	166.	11871.
Total root-zone supply	375.	1382.	1958.	1742.	4176.	7100.	6528.	6046.	2763.	2206.	1647.	1987.	37910.
Potential consumptive use on irrigated cropland	342.	311.	445.	1125.	2633.	4641.	6658.	5475.	2759.	1557.	767.	369.	27082.
Supply minus use	33.	1072.	1513.	617.	1543.	2458.	-130.	571.	4.	649.	880.	1618.	10828.
Cumulative soil moisture (maximum capacity=4,466 a.f.)	3410.	4466.	4466.	4466.	4466.	4466.	4336.	4466.	4466.	4466.	4466.	4466.	0.
Consumptive use deficit	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Actual consumptive use	342.	311.	445.	1125.	2633.	4641.	6658.	5475.	2759.	1557.	767.	369.	27082.
Addition to ground water	0.	16.	1513.	617.	1543.	2458.	0.	441.	4.	649.	880.	1618.	9739.
Net water surface evaporation	11.	3.	16.	39.	69.	70.	96.	71.	47.	46.	26.	-9.	486.
M and I consumptive use	18.	22.	31.	40.	40.	44.	62.	62.	44.	31.	26.	22.	442.
Supply to wetland and ground water	845.	685.	2169.	2248.	7093.	11120.	4448.	2932.	1573.	2376.	1869.	2599.	39962.
Precipitation on wetland	0.	155.	215.	60.	76.	143.	166.	284.	80.	138.	172.	239.	1729.
Wetland consumptive use	63.	67.	116.	320.	509.	976.	1595.	1457.	765.	555.	205.	73.	6700.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													25886.
Consumptive use by native vegetation in addition to precipitation	15.	15.	30.	60.	120.	210.	315.	315.	210.	120.	30.	30.	1470.
Outflow plus ground water storage change	767.	758.	2237.	1928.	6540.	10078.	2705.	1444.	678.	1839.	1806.	2736.	35520.
Beaver River outflow to Minersville Reservoir	2120.	1890.	1970.	770.	420.	3280.	1000.	1160.	1190.	1160.	2810.	2930.	20700.
Ground water outflow	109.	109.	108.	108.	108.	108.	108.	108.	108.	108.	109.	109.	1300.
Change in ground water storage	-1462.	-1241.	169.	1050.	6012.	6690.	1597.	-176.	-620.	-433.	-1113.	-303.	11520.

TABLE 53.---Representative potential consumptive use (calendar year 1963), Manderfield (2B-2), Beaver River Basin

Land use	Acres	MONTHLY CONSUMPTIVE USE, Inches												Annual Use	
		Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Inches	Acre-Feet
		Irrigated Cropland													
Alfalfa	928	.20	.31	.35	.63	3.74	4.61	6.80	5.82	3.90	1.06	.39	.22	28.03	2,168
Small grain	190	.13	.20	.22	.53	3.12	4.78	5.52	1.98	.99	.66	.24	.14	18.49	293
Pasture	233	.20	.31	.35	.50	3.47	3.76	5.58	4.77	3.00	1.06	.39	.22	23.60	458
Suburban crops	40	.20	.31	.35	.50	3.47	3.76	5.58	4.77	3.00	1.06	.39	.22	23.60	79
Total use	1391.	.19	.30	.34	.59	3.60	4.47	6.38	5.09	3.33	1.00	.36	.21	25.86 ^a	2,998
Wetlands (Phreatophytes)															
Sage and Rabbitbrush W1	55	.13	.20	.22	.39	.96	1.31	2.70	2.85	2.29	1.27	.20	.13	12.47	56
Willows and cottonwoods W2	108	.33	.63	1.00	2.14	5.47	5.84	8.70	7.63	5.40	3.33	.98	.42	41.88	377
Total use	163	.29	.52	.73	1.55	3.98	4.34	6.20	6.04	4.24	2.65	.66	.29	31.49 ^a	433
Consumptive Use of Precipitation															
Idle land	1,156													9.79	943
Native vegetation	9,018													9.79	7,357
Town and community area	132													9.79	108
Water Surface Evaporation															
Net evaporation	12	1.00	0	2.00	3.00	8.00	6.00	13.00	5.00	4.00	5.00	2.00	1.00	50.00	50
GRAND TOTAL	11,872													12.02 ^a	11,889

^aWeighted value.

TABLE 54 .---Annual water budget, Manderfield (2B-2), Beaver River Basin

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Ground water tributary inflow	108.	108.	108.	107.	107.	107.	107.	107.	-107.	108.	108.	108.	1290.
Surface tributary inflow	119.	113.	158.	275.	837.	663.	361.	181.	120.	121.	113.	112.	3173.
Diversions to cropland	101.	96.	134.	234.	711.	564.	307.	154.	102.	103.	96.	95.	2697.
26 percent to root-zone	25.	25.	35.	61.	185.	147.	80.	40.	27.	27.	25.	25.	701.
Pumped irrigation water	0.	0.	0.	0.	118.	386.	538.	420.	218.	0.	0.	0.	1680.
32 percent to root-zone	0.	0.	0.	0.	38.	124.	172.	134.	70.	0.	0.	0.	538.
Precipitation on cropland	114.	51.	9.	96.	97.	54.	93.	32.	12.	39.	0.	31.	627.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	141.	76.	44.	157.	320.	324.	345.	207.	108.	66.	25.	56.	1866.
Potential consumptive use on irrigated croplands	32.	21.	51.	83.	398.	708.	735.	584.	418.	92.	30.	25.	3176.
Supply minus use	109.	55.	-7.	74.	-78.	-384.	-390.	-377.	-310.	-26.	-5.	31.	-1309.
Cumulative soil moisture (maximum capacity-440 a.f.)	223.	278.	271.	344.	266.	0.	0.	0.	0.	0.	0.	31.	
Consumptive use deficit	0.	0.	0.	0.	0.	-118.	-390.	-377.	-310.	-26.	-5.	0.	-1226.
Actual consumptive use	32.	21.	51.	83.	398.	590.	345.	207.	108.	66.	25.	25.	1950.
Addition to ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Net water surface evaporation	0.	1.	3.	4.	7.	9.	9.	9.	8.	4.	3.	1.	57.
M and I consumptive use	1.	1.	2.	2.	2.	3.	4.	4.	3.	2.	2.	1.	27.
Supply to wetland and ground water	200.	194.	226.	316.	713.	488.	203.	100.	120.	196.	191.	194.	3140.
Precipitation on wetland	13.	6.	1.	11.	11.	6.	11.	4.	1.	5.	0.	4.	74.
Wetland consumptive use	5.	4.	13.	26.	51.	80.	90.	81.	64.	28.	6.	4.	452.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													4678.
Consumptive use by native vegetation in addition to precipitation	18.	18.	36.	72.	144.	252.	378.	378.	252.	144.	36.	36.	1764.
Outflow plus ground water storage change	190.	178.	178.	229.	529.	163.	-254.	-355.	-195.	28.	149.	157.	998.
Surface and ground water outflow to Minersville Reservoir	97.	68.	83.	12.	15.	256.	0.	8.	14.	16.	145.	76.	790.
Change in ground water storage	93.	110.	95.	217.	514.	-93.	-254.	-363.	-209.	12.	4.	81.	208.

TABLE 55.--Annual water budget, Manderfield (2B-2), Beaver River Basin

	CALENDAR YEAR 1957													
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual	
	Acre-Feet													
Ground water tributary inflow	108.	108.	108.	107.	107.	107.	107.	107.	107.	108.	108.	108.	1290.	
Surface tributary inflow	111.	106.	129.	263.	846.	2737.	882.	399.	197.	205.	169.	173.	6217.	
Diversions to cropland	94.	90.	110.	224.	719.	2326.	750.	339.	167.	174.	144.	147.	5284.	
26 percent to root-zone	25.	23.	29.	58.	187.	605.	195.	88.	44.	45.	37.	38.	1374.	
pumped irrigation water	0.	0.	0.	0.	123.	405.	563.	440.	229.	0.	0.	0.	1760.	
32 percent to root-zone	0.	0.	0.	0.	39.	130.	180.	141.	73.	0.	0.	0.	563.	
Precipitation on cropland	243.	70.	137.	259.	273.	98.	92.	89.	0.	278.	141.	49.	1728.	
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
Total root-zone supply	267.	93.	165.	317.	499.	833.	467.	318.	117.	323.	179.	87.	3665.	
Potential consumptive use on irrigated croplands	25.	39.	59.	83.	299.	587.	710.	571.	322.	84.	28.	29.	2838.	
Supply minus use	242.	55.	107.	234.	200.	245.	-243.	-253.	-205.	239.	150.	57.	828.	
Gumulative soil moisture (maximum capacity-440 a.f.)	273.	328.	435.	440.	440.	440.	197.	0.	0.	239.	389.	440.		
Consumptive use deficit	0.	0.	0.	0.	0.	0.	0.	-56.	-205.	0.	0.	0.	262.	
Actual consumptive use	25.	39.	59.	83.	299.	587.	710.	515.	117.	84.	28.	29.	2576.	
Addition to ground water	0.	0.	0.	228.	200.	245.	0.	0.	0.	0.	0.	7.	680.	
Net water surface evaporation	-1.	1.	2.	2.	2.	6.	8.	8.	6.	1.	2.	1.	36.	
M and I consumptive use	1.	1.	2.	2.	2.	3.	4.	4.	3.	2.	2.	1.	27.	
Supply to wetland and ground water	195.	189.	205.	536.	922.	2346.	602.	265.	178.	265.	236.	248.	6187.	
Precipitation on wetland	28.	8.	16.	30.	32.	11.	11.	10.	0.	33.	17.	6.	202.	
Wetland consumptive use	4.	7.	15.	26.	38.	66.	87.	79.	49.	26.	6.	5.	409.	
Precipitation and consumptive use on idle land, native vegetation and town and community areas													12771.	
Consumptive use by native vegetation in addition to precipitation	35.	35.	70.	140.	280.	490.	735.	735.	490.	280.	70.	70.	3430.	
Outflow plus ground water storage change	184.	155.	136.	401.	635.	1801.	-209.	-539.	-361.	-9.	176.	179.	2550.	
Surface and ground water outflow to Minersville Reservoir	96.	104.	71.	36.	166.	767.	109.	119.	54.	131.	191.	146.	1990.	
Change in ground water storage	88.	51.	65.	365.	469.	1034.	-318.	-658.	-415.	-140.	-15.	33.	560.	

TABLE 56.---Annual water budget, Manderfield (2B-2), Beaver River Basin

	CALENDAR YEAR 1958												
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Ground water tributary inflow	108.	108.	108.	107.	107.	107.	107.	107.	107.	108.	108.	108.	1290.
Surface tributary inflow	148.	140.	157.	411.	2050.	1450.	771.	263.	223.	182.	165.	142.	6102.
Diversions to cropland	126.	119.	133.	349.	1742.	1232.	655.	224.	190.	155.	140.	121.	5187.
26 percent to root-zone	33.	31.	25.	91.	453.	320.	170.	58.	49.	40.	36.	31.	1349.
Pumped irrigation water	0.	0.	0.	0.	129.	423.	589.	460.	239.	0.	0.	0.	1840.
32 percent to root-zone	0.	0.	0.	0.	41.	135.	188.	147.	76.	0.	0.	0.	589.
Precipitation on cropland	75.	155.	190.	57.	105.	0.	2.	211.	77.	22.	43.	0.	937.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	108.	186.	224.	148.	599.	456.	361.	417.	202.	62.	80.	31.	2874.
Potential consumptive use on irrigated croplands	26.	39.	37.	71.	401.	627.	690.	625.	356.	95.	37.	31.	2037.
Supply minus use	82.	147.	187.	77.	197.	-171.	-329.	-209.	-154.	-34.	43.	1.	-162.
Cumulative soil moisture (maximum capacity-440 a.f.)	440.	440.	440.	440.	440.	269.	0.	0.	0.	0.	43.	44.	.
Consumptive use deficit	0.	0.	0.	0.	0.	0.	-61.	-209.	-154.	-34.	0.	0.	-457.
Actual consumptive use	26.	39.	37.	71.	401.	627.	630.	417.	202.	62.	37.	31.	2580.
Addition to ground water	82.	147.	187.	77.	197.	0.	0.	0.	0.	0.	0.	0.	691.
Net water surface evaporation	0.	0.	1.	5.	5.	9.	12.	6.	6.	5.	3.	1.	53.
M and I consumptive use	1.	1.	2.	2.	2.	3.	4.	4.	3.	2.	2.	1.	27.
Supply to wetland and ground water	304.	363.	414.	497.	1853.	1090.	503.	154.	195.	243.	232.	217.	6065.
Precipitation on wetland	5.	18.	22.	7.	12.	0.	0.	25.	9.	3.	5.	0.	110.
Wetland consumptive use	4.	7.	10.	22.	52.	71.	85.	87.	55.	29.	8.	5.	433.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													6954.
Consumptive use by native vegetation in addition to precipitation	36.	36.	77.	144.	288.	504.	756.	756.	504.	288.	72.	72.	3528.
Outflow plus ground water storage change													
Surface and ground water outflow to Minersville Reservoir	273.	338.	355.	338.	1525.	513.	-338.	-663.	-355.	-72.	157.	140.	2213.
Change in ground water storage	116.	147.	152.	238.	572.	324.	110.	101.	108.	90.	154.	126.	2247.
	157.	191.	203.	100.	953.	191.	-448.	-764.	-463.	-171.	3.	14.	-34.

TABLE 57.--Annual water budget, Manderfield (2B-2), Beaver River Basin

	CALENDAR YEAR 1959												
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Ground water tributary inflow	108.	108.	108.	107.	107.	107.	107.	107.	107.	108.	108.	108.	1290.
Surface tributary inflow	140.	124.	152.	243.	309.	213.	124.	112.	6.	107.	96.	9.	1621.
Diversions to cropland	115.	105.	129.	207.	263.	181.	105.	106.	82.	91.	82.	34.	1548.
26 percent to root-zone	31.	27.	34.	54.	68.	47.	27.	26.	21.	24.	21.	22.	402.
Pumped irrigation water	0.	0.	0.	0.	137.	451.	627.	450.	255.	0.	0.	0.	1960.
32 percent to root-zone	0.	0.	0.	0.	44.	147.	201.	157.	82.	0.	0.	0.	627.
Precipitation on cropland	28.	201.	2.	54.	31.	11.	61.	94.	84.	31.	17.	69.	685.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	59.	228.	37.	108.	143.	202.	289.	277.	187.	55.	38.	91.	1714.
Potential consumptive use on irrigated croplands	29.	23.	46.	91.	331.	691.	813.	613.	329.	85.	34.	26.	3114.
Supply minus use	30.	200.	-10.	17.	-187.	-488.	-523.	-226.	-142.	-30.	5.	65.	-1400.
Cumulative soil moisture (maximum capacity-440 a.f.)	74.	274.	264.	281.	64.	0.	0.	0.	0.	0.	5.	70.	.
Consumptive use deficit	0.	0.	0.	0.	0.	-205.	-523.	-326.	-142.	-30.	0.	0.	-1427.
Actual consumptive use	29.	28.	46.	91.	331.	296.	289.	277.	187.	55.	24.	26.	1688.
Addition to ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Net water surface evaporation	1.	0.	3.	5.	7.	9.	12.	9.	6.	5.	3.	0.	57.
M and I consumptive use	1.	1.	2.	2.	2.	3.	4.	4.	3.	2.	2.	1.	27.
Supply to wetland and ground water	215.	204.	222.	289.	295.	117.	-13.	29.	91.	185.	178.	184.	1997.
Precipitation on wetland	3.	23.	0.	6.	4.	1.	7.	11.	10.	4.	2.	8.	80.
Wetland consumptive use	5.	5.	12.	28.	43.	78.	100.	85.	50.	26.	7.	4.	443.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													5057.
Consumptive use by native vegetation in addition to precipitation	9.	9.	18.	36.	72.	126.	189.	189.	126.	72.	18.	18.	882.
Outflow plus ground water storage change	205.	213.	192.	232.	184.	-86.	-294.	-234.	-75.	90.	155.	170.	752.
Surface and ground water outflow to Minersville Reservoir	122.	115.	64.	0.	78.	65.	129.	37.	5.	40.	80.	94.	865.
Change in ground water storage	83.	94.	98.	232.	106.	-151.	-423.	-271.	-83.	50.	75.	76.	-114.

TABLE 58.--Annual water budget, Manderfield (2B-2), Beaver River Basin

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Ground water tributary inflow	108.	108.	108.	107.	107.	107.	107.	107.	107.	108.	108.	108.	1290.
Surface tributary inflow	107.	94.	131.	291.	695.	359.	145.	102.	108.	115.	111.	104.	2362.
Diversions to cropland	21.	80.	111.	247.	591.	305.	123.	87.	92.	98.	94.	88.	2008.
26 percent to root-zone	24.	21.	29.	64.	156.	79.	32.	23.	24.	25.	25.	23.	522.
Pumped irrigation water	0.	0.	0.	0.	137.	451.	627.	490.	255.	0.	0.	0.	1960.
32 percent to root-zone	0.	0.	0.	0.	44.	144.	201.	157.	82.	0.	0.	0.	627.
Precipitation on cropland	43.	75.	96.	81.	65.	14.	45.	5.	263.	142.	143.	16.	990.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	67.	96.	125.	145.	262.	238.	278.	185.	369.	168.	168.	39.	2139.
Potential consumptive use on irrigated croplands	24.	26.	60.	91.	364.	668.	773.	600.	398.	82.	41.	26.	3153.
Supply minus use	43.	71.	65.	54.	-101.	-431.	-496.	-415.	-29.	86.	127.	13.	-1014.
Cumulative soil moisture (maximum capacity-440 a.f.)	113.	184.	248.	302.	201.	0.	0.	0.	0.	86.	212.	226.	
Consumptive use deficit	0.	0.	0.	0.	0.	-230.	-496.	-415.	-29.	0.	0.	0.	-1170.
Actual consumptive use	24.	26.	60.	91.	364.	439.	278.	185.	369.	82.	41.	26.	1983.
Addition to ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Net water surface evaporation	0.	1.	2.	4.	7.	9.	12.	10.	4.	4.	2.	1.	56.
M and I consumptive use	1.	1.	2.	2.	2.	3.	4.	4.	3.	2.	2.	1.	27.
Supply to wetland and ground water	190.	180.	206.	327.	596.	230.	3.	16.	102.	192.	190.	187.	2619.
Precipitation on wetland	5.	9.	11.	9.	8.	2.	5.	1.	31.	17.	17.	2.	116.
Wetland consumptive use	4.	5.	16.	28.	47.	76.	95.	83.	61.	25.	9.	4.	451.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													7334.
Consumptive use by native vegetation in addition to precipitation	13.	13.	26.	52.	104.	182.	273.	273.	182.	104.	26.	26.	1274.
Outflow plus ground water storage change	178.	171.	176.	257.	453.	-26.	-359.	-340.	-110.	79.	173.	159.	810.
Surface and ground water outflow to Minersville Reservoir	83.	93.	92.	2.	20.	16.	19.	14.	21.	33.	81.	80.	554.
Change in ground water storage	95.	78.	84.	255.	433.	-42.	-378.	-354.	-191.	46.	92.	79.	256.

TABLE 59.---Annual water budget, Manderfield (2B-2), Beaver River Basin

CALENDAR YEAR 1961

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Ground water tributary inflow	108.	108.	108.	107.	107.	107.	107.	107.	107.	108.	108.	108.	1290.
Surface tributary inflow	88.	86.	122.	263.	582.	326.	129.	139.	148.	127.	110.	112.	2242.
Diversions to cropland	75.	73.	104.	224.	495.	266.	110.	118.	126.	106.	93.	95.	1906.
26 percent to root-zone	19.	19.	27.	58.	129.	74.	29.	31.	33.	28.	24.	25.	495.
Pumped irrigation water	0.	0.	0.	0.	120.	296.	550.	430.	224.	0.	0.	0.	1720.
32 percent to root-zone	0.	0.	0.	0.	38.	127.	176.	138.	72.	0.	0.	0.	550.
Precipitation on cropland	85.	0.	153.	177.	125.	0.	147.	280.	207.	16.	60.	40.	1290.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	105.	19.	180.	235.	292.	201.	351.	449.	311.	44.	85.	65.	2336.
Potential consumptive use on irrigated croplands	26.	31.	45.	78.	354.	688.	753.	602.	290.	75.	30.	26.	2997.
Supply minus use	79.	-12.	135.	157.	-61.	-487.	-402.	-154.	21.	-31.	55.	39.	-660.
Cumulative soil moisture (maximum capacity-440 a.f.)	304.	293.	428.	440.	379.	0.	0.	0.	21.	0.	55.	94.	
Consumptive use deficit	0.	0.	0.	0.	0.	-109.	-402.	-154.	0.	-9.	0.	0.	-673.
Actual consumptive use	26.	31.	45.	78.	354.	579.	351.	449.	290.	66.	30.	26.	2323.
Addition to ground water	0.	0.	0.	145.	0.	0.	0.	0.	0.	0.	0.	0.	145.
Net water surface evaporation	0.	1.	1.	3.	6.	8.	9.	4.	4.	4.	3.	1.	44.
M and I consumptive use	1.	1.	2.	2.	2.	3.	4.	4.	3.	2.	2.	1.	27.
Supply to wetland and ground water	175.	173.	200.	452.	514.	231.	19.	70.	144.	201.	189.	194.	2560.
Precipitation on wetland	10.	0.	18.	21.	15.	0.	17.	33.	24.	2.	7.	5.	151.
Wetland consumptive use	4.	6.	12.	24.	45.	78.	92.	83.	44.	23.	6.	4.	422.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													9546.
Consumptive use by native vegetation in addition to precipitation	12.	12.	24.	48.	96.	168.	252.	252.	168.	96.	24.	24.	1176.
Outflow plus ground water storage change	169.	155.	182.	400.	387.	-15.	-308.	-233.	-44.	84.	166.	170.	1113.
Surface and ground water outflow to Minersville Reservoir	72.	67.	80.	18.	26.	48.	39.	25.	34.	33.	95.	72.	609.
Change in ground water storage	97.	88.	102.	382.	361.	-63.	-347.	-258.	-78.	51.	71.	98.	504.

TABLE 60.--Annual water budget, Manderfield (2B-2), Beaver River Basin

	CALENDAR YEAR 1962												Annual
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	
	Acre-Feet												
Ground water tributary inflow	108.	108.	108.	107.	107.	107.	107.	107.	107.	108.	108.	108.	1290.
Surface tributary inflow	102.	99.	116.	606.	942.	840.	536.	235.	151.	149.	125.	115.	4016.
Diversions to cropland	87.	84.	99.	515.	801.	714.	456.	200.	128.	127.	106.	98.	3414.
26 percent to root-zone	23.	22.	26.	134.	208.	186.	118.	52.	33.	33.	28.	25.	888.
Pumped irrigation water	0.	0.	0.	0.	120.	396.	550.	430.	224.	0.	0.	0.	1720.
32 percent to root-zone	0.	0.	0.	0.	38.	127.	176.	138.	772.	0.	0.	0.	550.
Precipitation on cropland	88.	272.	137.	45.	171.	33.	26.	19.	148.	77.	14.	0.	1031.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	111.	294.	163.	179.	418.	346.	320.	209.	253.	109.	42.	25.	2469.
Potential consumptive use on irrigated croplands	22.	31.	36.	97.	310.	558.	673.	551.	368.	98.	48.	28.	2820.
Supply minus use	89.	263.	127.	82.	108.	-212.	-353.	-342.	-115.	11.	-7.	-2.	-352.
Cumulative soil moisture (maximum capacity-440 a.f.)	183.	440.	440.	440.	440.	228.	0.	0.	0.	11.	4.	2.	
Consumptive use deficit	0.	0.	0.	0.	0.	0.	-125.	-342.	-115.	0.	0.	0.	-582.
Actual consumptive use	22.	31.	36.	97.	310.	558.	548.	209.	253.	98.	48.	28.	2238.
Addition to ground water	0.	6.	127.	82.	108.	0.	0.	0.	0.	0.	0.	0.	322.
Net water surface evaporation	0.	-1.	2.	4.	5.	7.	11.	10.	6.	4.	3.	1.	53.
M and I consumptive use	1.	1.	2.	2.	2.	3.	4.	4.	3.	2.	2.	1.	27.
Supply to wetland and ground water	186.	191.	322.	655.	909.	624.	334.	138.	144.	218.	200.	196.	4111.
Precipitation on wetland	10.	32.	16.	5.	20.	4.	3.	2.	17.	9.	2.	0.	121.
Wetland consumptive use	3.	6.	9.	30.	40.	63.	82.	76.	56.	30.	10.	4.	411.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													7650.
Consumptive use by native vegetation in addition to precipitation	23.	23.	46.	92.	184.	322.	483.	483.	322.	184.	46.	46.	2254.
Outflow plus ground water storage change	170.	194.	282.	538.	699.	243.	-229.	-419.	-217.	13.	146.	145.	1566.
Surface and ground water outflow to Minersville Reservoir	57.	133.	86.	49.	85.	79.	74.	25.	30.	81.	103.	86.	888.
Change in ground water storage	113.	61.	196.	489.	614.	164.	-303.	-444.	-247.	-68.	43.	59.	678.

TABLE 61.--Annual water budget, Manderfield (2B-2), Beaver River Basin

CALENDAR YEAR 1963

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Ground water tributary inflow	108.	108.	108.	107.	107.	107.	107.	107.	107.	108.	108.	108.	1290.
Surface tributary inflow	96.	117.	123.	167.	683.	412.	161.	166.	128.	113.	114.	104.	2384.
Diversions to cropland	82.	99.	105.	142.	581.	350.	137.	141.	109.	96.	97.	38.	2026.
26 percent to root-zone	21.	26.	27.	37.	151.	91.	36.	27.	28.	25.	25.	23.	527.
pumped irrigation water	0.	0.	0.	0.	123.	405.	563.	440.	229.	0.	0.	0.	1760.
32 percent to root-zone	0.	0.	0.	0.	39.	130.	180.	141.	73.	0.	0.	0.	563.
Precipitation on cropland	22.	164.	67.	110.	6.	130.	19.	277.	183.	8.	133.	16.	1135.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	43.	190.	94.	147.	197.	351.	235.	455.	285.	33.	158.	39.	2225.
Potential consumptive use on irrigated croplands	22.	35.	39.	68.	417.	518.	740.	590.	386.	116.	42.	24.	2998.
Supply minus use	20.	155.	55.	79.	-221.	-167.	-505.	-135.	-101.	-84.	115.	15.	-772.
Cumulative soil moisture (maximum capacity-440 a.f.)	22.	178.	233.	312.	91.	0.	0.	0.	0.	0.	115.	130.	
Consumptive use deficit	0.	0.	0.	0.	0.	-76.	-505.	-135.	-101.	-84.	0.	0.	-901.
Actual consumptive use	22.	35.	39.	68.	417.	442.	235.	455.	285.	33.	42.	24.	2097.
Addition to ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Net water surface evaporation	1.	0.	2.	3.	8.	6.	13.	5.	4.	5.	21.	1.	49.
M and I consumptive use	1.	1.	2.	2.	2.	3.	4.	4.	3.	2.	2.	1.	27.
Supply to wetland and ground water	181.	198.	200.	232.	590.	289.	35.	86.	127.	189.	193.	187.	2507.
Precipitation on wetland	3.	19.	8.	13.	1.	15.	2.	32.	21.	1.	16.	2.	133.
Wetland consumptive use	4.	7.	10.	21.	54.	59.	91.	82.	59.	36.	9.	4.	433.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													8408.
Consumptive use by native vegetation in addition to precipitation	13.	13.	26.	52.	104.	182.	273.	273.	182.	104.	26.	26.	1274.
Outflow plus ground water storage change	181.	198.	171.	172.	433.	64.	-326.	-236.	-93.	50.	173.	159.	933.
Surface and ground water outflow to Minersville Reservoir	81.	95.	88.	9.	0.	43.	25.	20.	41.	40.	94.	78.	614.
Change in ground water storage	86.	103.	83.	163.	433.	21.	-351.	-256.	-134.	10.	79.	81.	319.

TABLE 62.--Annual water budget, Manderfield (2B-2), Beaver River Basin

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Ground water tributary inflow	108.	108.	108.	107.	107.	107.	107.	107.	107.	108.	108.	108.	1230.
Surface tributary inflow	96.	85.	100.	203.	876.	647.	412.	187.	125.	114.	113.	112.	3070.
Diversions to cropland	82.	72.	85.	173.	745.	550.	350.	159.	106.	97.	96.	95.	2609.
26 percent to root-zone	21.	19.	22.	45.	194.	143.	91.	41.	28.	25.	25.	25.	678.
Pumped irrigation water	0.	0.	0.	0.	126.	414.	576.	450.	234.	0.	0.	0.	1800.
32 percent to root-zone	0.	0.	0.	0.	40.	132.	184.	144.	75.	0.	0.	0.	576.
Precipitation on cropland	8.	133.	16.	11.	1.	75.	286.	141.	72.	28.	204.	107.	1062.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	29.	151.	38.	56.	235.	351.	542.	327.	175.	53.	229.	131.	2316.
Potential consumptive use on irrigated croplands	23.	23.	35.	71.	328.	560.	771.	567.	310.	100.	29.	27.	2844.
Supply minus use	6.	128.	4.	-15.	-93.	-209.	-229.	-241.	-135.	-47.	199.	104.	-528.
Cumulative soil moisture (maximum capacity-440 a.f.)	136.	264.	268.	253.	160.	0.	0.	0.	0.	0.	199.	304.	-701.
Consumptive use deficit	0.	0.	0.	0.	0.	-49.	-229.	-241.	-135.	-47.	0.	0.	2143.
Actual consumptive use	23.	23.	35.	71.	328.	511.	542.	327.	175.	53.	29.	27.	0.
Addition to ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Net water surface evaporation	1.	0.	3.	3.	6.	6.	9.	7.	5.	4.	1.	0.	46.
M and I consumptive use	1.	1.	2.	2.	2.	3.	4.	4.	3.	2.	2.	1.	27.
Supply to wetland and ground water	181.	173.	181.	260.	741.	470.	231.	98.	121.	190.	193.	194.	3033.
Precipitation on wetland	1.	16.	2.	1.	0.	9.	31.	17.	8.	3.	24.	13.	124.
Wetland consumptive use	4.	4.	9.	22.	42.	63.	94.	79.	47.	31.	6.	4.	406.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													7840.
Consumptive use by native vegetation in addition to precipitation	18.	18.	36.	72.	144.	252.	378.	378.	252.	144.	36.	36.	1764.
Outflow plus ground water storage change	160.	166.	138.	167.	555.	163.	-210.	-342.	-170.	19.	174.	166.	987.
Surface and ground water outflow to Minersville Reservoir	65.	89.	65.	42.	81.	17.	66.	45.	8.	31.	104.	111.	724.
Change in ground water storage	95.	77.	73.	125.	474.	146.	-276.	-387.	-178.	-12.	70.	55.	263.

TABLE 64.--Average water budget, Minersville Reservoir, Beaver River Basin, 1956-1965

	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
Reservoir storage at beginning of month	6,479	7,908	9,536	10,783	10,260	8,410	7,880	5,073	2,919	2,524	3,177	5,230	
Inflow from Beaver River ^a	1,580	1,784	1,591	806	1,943	3,208	1,187	841	732	1,035	2,130	1,822	18,659
Inflow from Indian Creek	177	198	177	90	216	-357	132	93	93	115	236	202	2,087
Total inflow	1,757	1,982	1,768	896	2,159	3,565	1,319	934	825	1,150	2,366	2,024	20,746
Gross evaporation	35	56	143	228	333	352	279	271	127	100	95	35	2,054
Precipitation	26	52	55	43	46	23	30	36	19	21	57	22	430
Net evaporation	9	4	88	185	287	329	249	235	106	79	38	13	1,624
Seepage	319	349	436	400	320	300	180	100	90	120	275	288	3,178
Releases	-	-	-	834	3,402	3,466	3,697	2,753	1,024	298	-	-	15,474
Total depletions	328	353	524	1,419	4,009	4,095	4,126	3,088	1,220	497	313	301	20,276
Change in storage ^b	1,429	1,629	1,244	-523	-1,850	-530	-2,807	-2,154	-395	653	2,053	1,723	472
Reservoir storage at end of month	7,908	9,536	10,783	10,260	8,410	7,880	5,073	2,919	2,524	3,177	5,230	6,951	
Average storage	7,193	8,722	10,159	10,521	9,335	8,145	6,476	3,996	2,721	2,850	4,203	6,090	
Average surface area - Acres	518	587	652	638	626	561	473	345	268	283	365	462	

^a Includes approximately 1,000 acre feet ground water inflow from Beaver River Watershed. Inflow was determined by manipulating streamflow and water level records maintained by the USGS.

^b Long term average would show no annual change in storage.

TABLE 65.--Representative potential consumptive use (calendar year 1961), Minersville-Milford (2B-3, 4, 6), Beaver River Basin

Land use	Acres	MONTHLY CONSUMPTIVE USE, Inches												Annual Use	
		Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Inches	Acre-Feet
		Irrigated Cropland													
Alfalfa	9,509	.22	.29	.45	1.04	3.95	7.10	8.15	6.78	3.21	.85	.27	.23	32.52	25,769
Small Grain	2,565	.14	.18	.28	.78	3.26	7.98	5.87	1.66	.81	.47	.17	.14	21.74	4,647
Corn	744	.14	.18	.28	.50	1.39	3.77	6.75	6.84	2.40	.47	.17	.14	23.03	1,428
Potatoes	671	.14	.18	.28	.50	.95	3.02	7.26	8.50	3.72	.47	.17	.14	25.34	1,417
Hayland	91	.22	.29	.45	1.27	3.29	5.78	6.75	5.82	2.82	1.28	.27	.23	28.45	216
Pasture	296	.22	.29	.45	1.27	3.29	5.78	6.75	5.82	2.82	1.28	.27	.23	28.45	702
Suburban crops	700	.22	.29	.45	1.27	3.29	5.78	6.75	5.82	2.82	1.28	.27	.23	28.45	1,660
Total use	14,576	.20	.26	.40	.96	3.51	6.80	7.53	5.89	2.74	.78	.24	.20	29.50 ^a	35,839
Wetlands (Phreatophytes)															
Salt grass W2	702	.30	.38	.59	1.14	2.23	4.27	5.58	5.24	2.69	1.53	.52	.38	24.86	1,454
Sage and rabbitbrush W2	152	.21	.28	.50	.94	1.94	5.22	8.07	8.31	4.37	2.17	.54	.24	32.78	415
Pickleweed W2	1,191	.19	.24	.37	.72	1.39	2.77	3.60	3.26	1.62	.92	.03	.24	15.61	1,549
Total use	2,045	.23	.29	.45	.88	1.72	3.47	4.60	4.32	2.19	1.22	.39	.28	20.06 ^a	3,418
Consumptive Use of Precipitation															
Idle land	6,300													9.93	5,213
Native vegetation	23,771													9.93	19,670
Town and community area	2,089													9.93	1,729
Water Surface Evaporation															
Net evaporation	37	0	.65	1.30	3.57	6.49	9.40	11.67	4.86	5.84	4.22	2.92	.32	51.24	158
GRAND TOTAL	48,818													16.23 ^a	66,027

^aWeighted value.

TABLE 66.--Annual water budget, Minersville-Milford (2B-3, 4, 6), Beaver River Basin

	CALENDAR YEAR 1956												Annual
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	
	Acre-Feet												
Ground water inflow from other watersheds	198.	198.	198.	198.	196.	196.	196.	196.	198.	198.	198.	198.	2370.
Tributary inflow	100.	100.	134.	267.	768.	835.	401.	200.	167.	134.	134.	100.	3340.
Seepage and releases from Minersville Reservoir	275.	287.	356.	424.	3280.	7030.	2000.	1310.	273.	318.	230.	204.	15990.
Diversions to cropland	275.	287.	356.	424.	3280.	7030.	2000.	1310.	273.	318.	230.	204.	15990.
36 percent to root-zone	99.	103.	128.	153.	1181.	2531.	720.	472.	98.	114.	83.	72.	5756.
Pumped irrigation water	0.	0.	0.	0.	5330.	9020.	11069.	9429.	4920.	1230.	0.	0.	40998.
38 percent to root-zone	0.	0.	0.	0.	2025.	3428.	4206.	3583.	1870.	467.	0.	0.	15579.
Precipitation on cropland	661.	637.	216.	673.	1323.	0.	373.	0.	0.	505.	60.	361.	4810.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	760.	741.	345.	826.	4529.	5958.	5299.	4055.	1968.	1087.	143.	434.	26146.
Potential consumptive use on irrigated cropland	321.	215.	534.	1215.	4763.	7909.	8809.	6746.	4635.	1060.	272.	238.	36717.
Supply minus use	439.	525.	-189.	-389.	-234.	-1950.	-3510.	-2692.	-2667.	27.	-129.	197.	-10571.
Cumulative soil moisture (maximum capacity-4,956 a.f.)	1067.	1593.	1403.	1014.	780.	0.	0.	0.	0.	27.	0.	197.	
Consumptive use deficit	0.	0.	0.	0.	0.	-1170.	-3510.	-2692.	-2667.	0.	-102.	0.	-10141.
Actual consumptive use	321.	215.	534.	1215.	4763.	6739.	5299.	4055.	1968.	1060.	170.	238.	26576.
Addition to ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Net water surface evaporation	0.	2.	8.	14.	20.	32.	32.	35.	30.	14.	10.	2.	200.
M and I consumptive use	39.	47.	64.	80.	80.	90.	123.	123.	89.	64.	55.	47.	901.
Supply to wetland and ground water	435.	433.	488.	643.	938.	1980.	-2485.	-2506.	-1449.	-10.	414.	380.	-737.
Precipitation on wetland	93.	89.	30.	94.	186.	0.	52.	0.	0.	71.	8.	51.	675.
Wetland consumptive use	53.	34.	85.	157.	327.	565.	757.	694.	520.	234.	62.	47.	3536.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													10613.
Consumptive use by native vegetation in addition to precipitation	64.	64.	128.	256.	512.	896.	1344.	1344.	896.	512.	128.	128.	6272.
Outflow plus ground water storage change	410.	424.	305.	324.	284.	519.	-4533.	-4544.	-2866.	-685.	232.	255.	-9879.
Ground water outflow	48.	48.	48.	47.	47.	47.	47.	47.	47.	48.	48.	48.	570.
Change in ground water storage	362.	376.	257.	277.	237.	472.	-4580.	-4591.	-2913.	-733.	184.	207.	-10449.

TABLE 67 --Annual water budget, Minersville-Milford (2B-3, 4, 6), Beaver River Basin.

	CALENDAR YEAR 1957												
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Ground water inflow from other watersheds	198.	198.	198.	198.	196.	196.	196.	196.	198.	198.	198.	198.	2370.
Tributary inflow	205.	205.	274.	547.	1573.	1710.	821.	410.	342.	274.	275.	205.	6840.
Seepage and releases from Minersville Reservoir	256.	305.	368.	711.	2430.	5100.	6120.	5690.	3610.	1410.	415.	455.	26870.
Diversions to cropland	256.	305.	368.	711.	2430.	5100.	6120.	5690.	3610.	1410.	415.	455.	26870.
36 percent to root-zone	92.	110.	132.	256.	875.	1836.	2203.	2048.	1300.	508.	149.	165.	9673.
Pumped irrigation water	0.	0.	0.	0.	5200.	8800.	10800.	9200.	4800.	1200.	0.	0.	40000.
38 percent to root-zone	0.	0.	0.	0.	1976.	3344.	4104.	3496.	1824.	456.	0.	0.	15200.
Precipitation on cropland	2405.	204.	1178.	2573.	1768.	794.	277.	289.	0.	1659.	2429.	722.	14298.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	2497.	314.	1311.	2829.	4619.	5974.	6584.	5833.	3124.	2623.	2578.	887.	39171.
Potential consumptive use on irrigated cropland	232.	318.	600.	1195.	3724.	7073.	8726.	7245.	3854.	1033.	276.	283.	34559.
Supply minus use	2266.	-4.	711.	1634.	895.	-1099.	-2143.	-1412.	-730.	1590.	2302.	603.	4612.
Cumulative soil moisture (maximum capacity-4,956 a.f.)	2462.	2455.	3169.	4803.	4956.	3857.	1714.	302.	0.	1590.	3892.	4496.	
Consumptive use deficit	0.	0.	0.	0.	0.	0.	0.	0.	-428.	0.	0.	0.	-428.
Actual consumptive use	232.	318.	600.	1195.	3724.	7073.	8726.	7245.	3426.	1033.	276.	283.	34131.
Addition to ground water	0.	0.	0.	0.	742.	0.	0.	0.	0.	0.	0.	0.	742.
Net water surface evaporation	-4.	3.	6.	7.	11.	21.	29.	31.	22.	8.	4.	1.	137.
M and I consumptive use	39.	47.	64.	80.	80.	90.	123.	123.	89.	64.	55.	47.	901.
Supply to wetland and ground water	532.	548.	638.	1113.	2000.	1715.	678.	598.	916.	846.	673.	649.	10911.
Precipitation on wetland	337.	29.	165.	361.	248.	111.	39.	40.	0.	233.	341.	101.	2006.
Wetland consumptive use	38.	50.	96.	154.	256.	506.	749.	745.	433.	228.	63.	56.	3374.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													31545.
Consumptive use by native vegetation in addition to precipitation	113.	113.	226.	452.	904.	1582.	2373.	2373.	1582.	904.	226.	226.	11074.
Outflow plus ground water storage change	718.	414.	482.	868.	1088.	-261.	-2405.	-2480.	-1099.	-53.	730.	468.	-1532.
Ground water outflow	48.	48.	48.	47.	47.	47.	47.	47.	47.	48.	48.	48.	570.
Change in ground water storage	670.	366.	434.	821.	1041.	-308.	-2452.	-2527.	-1146.	-101.	682.	420.	-2102.

TABLE 68.---Annual water budget, Minersville-Milford (2B-3, 4, 6), Beaver River Basin

CALENDAR YEAR 1958

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Ground water inflow from other watersheds	198.	158.	198.	198.	196.	196.	196.	196.	198.	198.	198.	198.	2370.
Tributary inflow	200.	201.	268.	535.	1539.	1672.	803.	401.	334.	268.	268.	201.	6690.
Seepage and releases from Minersville Reservoir	573.	627.	889.	7810.	11670.	7310.	8080.	5700.	2620.	648.	404.	371.	46700.
Diversions to cropland	573.	627.	889.	7810.	11670.	7310.	8080.	5700.	2620.	648.	404.	371.	46700.
36 percent to root-zone	206.	226.	320.	2812.	4201.	2632.	2909.	2052.	943.	233.	145.	134.	16812.
Pumped irrigation water	0.	0.	0.	0.	4935.	8352.	10250.	8732.	4556.	1139.	0.	0.	37964.
38 percent to root-zone	0.	0.	0.	0.	1875.	3174.	3895.	3318.	1731.	433.	0.	0.	14426.
Precipitation on cropland	625.	1659.	1635.	722.	1299.	0.	0.	1587.	649.	156.	770.	24.	9127.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	832.	1885.	1955.	3533.	7375.	5805.	6804.	6957.	3324.	822.	915.	158.	40365.
Potential consumptive use on irrigated cropland	237.	416.	386.	1009.	4842.	7381.	8398.	7737.	4228.	1160.	297.	299.	36391.
Supply minus use	595.	1469.	1569.	2524.	2533.	-1575.	-1595.	-780.	-904.	-338.	618.	-141.	3975.
Cumulative soil moisture (maximum capacity-4,956 a.f.)	4956.	4956.	4956.	4956.	4956.	3381.	1786.	1006.	103.	0.	618.	476.	
Consumptive use deficit	0.	0.	0.	0.	0.	0.	0.	0.	0.	-235.	0.	0.	-235.
Actual consumptive use	237.	416.	386.	1009.	4842.	7381.	8398.	7737.	4228.	925.	297.	299.	36156.
Addition to ground water	134.	1469.	1569.	2524.	2533.	0.	0.	0.	0.	0.	0.	0.	8230.
Net water surface evaporation	1.	-1.	4.	13.	17.	31.	43.	25.	23.	17.	8.	2.	184.
M and I consumptive use	39.	47.	64.	80.	80.	90.	123.	123.	89.	64.	55.	47.	901.
Supply to wetland and ground water	860.	2223.	2536.	8162.	9765.	3252.	2110.	779.	364.	367.	661.	587.	31666.
Precipitation on wetland	881.	233.	229.	101.	182.	0.	0.	223.	91.	22.	108.	3.	1281.
Wetland consumptive use	39.	66.	62.	130.	333.	528.	721.	796.	475.	256.	68.	59.	9532.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													20145.
Consumptive use by native vegetation in addition to precipitation													
Outflow plus ground water storage change	178.	178.	356.	712.	1424.	2492.	3738.	3738.	2492.	1424.	356.	356.	17444.
Ground water outflow	730.	2212.	2348.	7421.	8190.	232.	-2350.	-3532.	-2512.	-1291.	345.	175.	11968.
	48.	48.	48.	47.	47.	47.	47.	47.	47.	48.	48.	48.	570.
Change in ground water storage	682.	2164.	2300.	7374.	8143.	185.	-2397.	-3579.	-2559.	-1339.	297.	127.	11398.

TABLE 69.--Annual water budget, Minersville-Milford (2B-3, 4, 6), Beaver River Basin

	CALENDAR YEAR 1959												
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Ground water inflow from other watersheds	198.	198.	198.	198.	196.	196.	196.	196.	198.	198.	198.	198.	2370.
Tributary inflow	54.	54.	72.	143.	412.	448.	215.	107.	90.	72.	72.	54.	1793.
Seepage and releases from Minersville Reservoir	389.	458.	554.	765.	4930.	4180.	5270.	3050.	1010.	230.	240.	255.	21330.
Diversions to cropland	389.	458.	554.	765.	4930.	4180.	5270.	3050.	1010.	230.	240.	255.	21330.
36 percent to root-zone	140.	165.	199.	275.	1775.	1505.	1897.	1098.	364.	83.	86.	92.	7679.
Pumped irrigation water	0.	0.	0.	0.	5161.	8734.	10718.	5131.	4764.	1151.	0.	0.	39704.
38 percent to root-zone	0.	0.	0.	0.	1961.	3319.	4073.	3470.	1810.	453.	0.	0.	15088.
Precipitation on cropland	241.	1599.	637.	493.	84.	120.	697.	469.	493.	313.	517.	914.	6578.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	381.	1764.	837.	768.	3820.	4944.	6668.	5037.	2667.	848.	603.	1006.	29344.
Potential consumptive use on irrigated cropland	278.	276.	496.	1353.	3882.	8043.	9316.	7107.	3703.	1066.	365.	243.	36128.
Supply minus use	103.	1488.	340.	-585.	-62.	-3099.	-2648.	-2070.	-1036.	-218.	239.	763.	-6784.
Cumulative soil moisture (maximum capacity-4,956 a.f.)	579.	2068.	2408.	1823.	1761.	0.	0.	0.	0.	0.	239.	1002.	0.
Consumptive use deficit	0.	0.	0.	0.	0.	-1338.	-2648.	-2070.	-1036.	-218.	0.	0.	-7310.
Actual consumptive use	278.	276.	496.	1353.	3882.	6705.	6668.	5037.	2667.	848.	365.	243.	28817.
Addition to ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Net water surface evaporation	2.	-1.	7.	17.	21.	31.	40.	34.	23.	16.	9.	0.	199.
M and I consumptive use	39.	47.	64.	80.	80.	90.	123.	123.	89.	64.	55.	47.	901.
Supply to wetland and ground water	460.	499.	554.	734.	1701.	-121.	-452.	-1371.	-988.	-115.	360.	368.	1627.
Precipitation on wetland	34.	224.	89.	69.	12.	17.	98.	66.	69.	44.	73.	128.	923.
Wetland consumptive use	46.	42.	79.	174.	267.	575.	800.	731.	416.	235.	84.	48.	3499.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													14513.
Consumptive use by native vegetation in addition to precipitation	77.	77.	154.	308.	616.	1078.	1617.	1617.	1078.	616.	154.	154.	7546.
Outflow plus ground water storage change	371.	603.	410.	321.	830.	-1757.	-2771.	-3654.	-2413.	-923.	195.	294.	-8494.
Ground water outflow	48.	48.	48.	47.	47.	47.	47.	47.	47.	48.	48.	48.	570.
Change in ground water storage	323.	555.	362.	274.	783.	-1804.	-2818.	-3701.	-2460.	-971.	147.	246.	-9064.

TABLE 70.---Annual water budget, Minersville-Milford (2B-3, 4, 6), Beaver River Basin
CALENDAR YEAR 1960

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Ground water inflow from other watersheds	198.	198.	198.	198.	196.	196.	196.	196.	198.	198.	198.	198.	2370.
Tributary inflow	73.	73.	97.	194.	558.	608.	292.	146.	122.	97.	97.	73.	2431.
Seepage and releases from Minersville Reservoir	271.	266.	300.	471.	1970.	1770.	1460.	1590.	313.	294.	260.	252.	9217.
Diversions to cropland	271.	266.	300.	471.	1970.	1770.	1460.	1590.	313.	294.	260.	252.	9217.
36 percent to root-zone	98.	96.	108.	170.	709.	637.	526.	572.	113.	106.	94.	91.	3318.
Pumped irrigation water	0.	0.	0.	0.	5974.	10110.	12407.	10569.	5514.	1378.	0.	0.	45953.
38 percent to root-zone	0.	0.	0.	0.	2270.	3842.	4715.	4016.	2095.	524.	0.	0.	17462.
Precipitation on cropland	180.	517.	878.	553.	433.	12.	361.	0.	1359.	2405.	1323.	301.	8321.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	278.	613.	986.	723.	3412.	4491.	5601.	4589.	3567.	3035.	1416.	391.	29102.
Potential consumptive use on irrigated cropland	186.	258.	662.	1304.	4284.	8043.	9487.	7016.	4735.	1077.	424.	247.	37724.
Supply minus use	92.	355.	324.	-582.	-872.	-3552.	-3886.	-2427.	-1168.	1958.	992.	144.	-8622.
Cumulative soil moisture (maximum capacity-4,956 a.f.)	1093.	1448.	1772.	1191.	319.	0.	0.	0.	0.	1958.	2950.	3095.	
Consumptive use deficit	0.	0.	0.	0.	0.	-3233.	-3886.	-2427.	-1168.	0.	0.	0.	-10716.
Actual consumptive use	186.	258.	662.	1304.	4284.	4810.	5601.	4589.	3567.	1077.	424.	247.	27008.
Addition to ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Net water surface evaporation	2.	2.	6.	16.	22.	34.	40.	37.	22.	11.	7.	2.	2001.
M and I consumptive use	39.	47.	64.	80.	80.	90.	123.	123.	89.	64.	55.	47.	901.
Supply to wetland and ground water	404.	392.	417.	597.	-357.	-2029.	-3455.	-2816.	-1686.	-115.	399.	384.	-7863.
Precipitation on wetland	25.	73.	123.	78.	61.	2.	51.	0.	191.	337.	186.	42.	1167.
Wetland consumptive use	31.	41.	105.	168.	294.	575.	815.	722.	532.	38.	97.	49.	3666.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													18350.
Consumptive use by native vegetation in addition to precipitation	39.	39.	78.	156.	312.	546.	819.	819.	546.	312.	78.	78.	3822.
Outflow plus ground water storage change	359.	385.	356.	351.	-903.	-3148.	-5038.	-4357.	-2573.	-327.	410.	299.	-14186.
Ground water outflow	48.	48.	48.	47.	47.	47.	47.	47.	47.	48.	48.	48.	570.
Change in ground water storage	311.	337.	308.	304.	-950.	-3195.	-5085.	-4404.	-2620.	-375.	362.	251.	-14754.

TABLE 71.--Annual water budget, Minersville-Milford (2B-3, 4, 6), Beaver River Basin

	CALENDAR YEAR 1961												
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Ground water inflow from other watersheds	198.	198.	198.	198.	196.	196.	196.	196.	198.	198.	198.	198.	2370.
Tributary inflow	68.	68.	91.	182.	524.	570.	274.	137.	114.	91.	89.	68.	2278.
Seepage and releases from Minersville Reservoir	288.	262.	329.	423.	1950.	2290.	2110.	1690.	313.	294.	260.	252.	10460.
Diversions to cropland	288.	262.	329.	423.	1950.	2290.	2110.	1690.	313.	294.	260.	252.	10460.
36 percent to root-zone	104.	94.	118.	152.	702.	824.	760.	608.	113.	106.	94.	91.	3766.
Pumped irrigation water	0.	0.	0.	0.	5299.	8968.	11006.	9376.	4892.	1223.	0.	0.	40765.
38 percent to root-zone	0.	0.	0.	0.	2014.	3408.	4182.	3563.	1859.	465.	0.	0.	15491.
Precipitation on cropland	890.	421.	1684.	1924.	938.	0.	156.	3487.	1371.	301.	433.	457.	12061.
Direct use Ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	994.	515.	1802.	2076.	3654.	4232.	5098.	7659.	3343.	871.	527.	548.	31318.
Potential consumptive use on irrigated cropland	236.	315.	485.	1169.	4265.	8261.	9145.	7153.	3325.	944.	294.	245.	35837.
Supply minus use	758.	200.	1316.	908.	-612.	-4029.	-4047.	506.	18.	-73.	233.	302.	-4520.
Cumulative soil moisture (maximum capacity-4,956 a.f.)	3852.	4052.	4956.	4956.	4344.	315.	0.	506.	524.	451.	684.	986.	
Consumptive use deficit	0.	0.	0.	0.	0.	0.	-3732.	0.	0.	0.	0.	0.	-3732.
Actual consumptive use	236.	315.	485.	1169.	4265.	8261.	5414.	7153.	3325.	944.	294.	245.	32106.
Addition to ground water	0.	0.	412.	908.	0.	0.	0.	0.	0.	0.	0.	0.	1320.
Net water surface evaporation	0.	2.	4.	11.	20.	29.	36.	15.	18.	13.	9.	1.	158.
M and I consumptive use	39.	47.	64.	80.	80.	90.	123.	123.	89.	64.	55.	47.	901.
Supply to wetland and ground water	411.	384.	844.	1468.	-146.	-1295.	-2521.	-2286.	-1453.	-65.	391.	379.	-3887.
Precipitation on wetland	125.	59.	236.	270.	132.	0.	22.	489.	192.	42.	61.	64.	1692.
Wetland consumptive use	39.	50.	77.	151.	293.	591.	785.	736.	373.	208.	67.	49.	3419.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													26605.
Consumptive use by native vegetation in addition to precipitation	43.	43.	86.	172.	344.	602.	903.	903.	602.	344.	86.	86.	4214.
Outflow plus ground water storage change	454.	351.	917.	1415.	-652.	-2488.	-4187.	-3435.	-2236.	-575.	299.	308.	-9828.
Ground water outflow	48.	48.	48.	47.	47.	47.	47.	47.	47.	48.	48.	48.	570.
Change in ground water storage	406.	303.	869.	1368.	-699.	-2535.	-4234.	-3482.	-2283.	-623.	251.	260.	-10398.

TABLE 72.--Annual water budget, Minersville-Milford (2B-3, 4, 6), Beaver River Basin

	CALENDAR YEAR 1962												Annual
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	
	Acre-Feet												
Ground water inflow from other watersheds	198.	198.	198.	198.	196.	196.	196.	196.	198.	198.	198.	198.	2370.
Tributary inflow	130.	130.	173.	346.	996.	1083.	520.	260.	217.	172.	173.	130.	4332.
Seepage and releases from Minersville Reservoir	311.	313.	377.	428.	3530.	2920.	4040.	2660.	338.	255.	252.	301.	15720.
Diversions to cropland	311.	313.	377.	428.	3530.	2920.	4040.	2660.	338.	255.	252.	301.	15720.
36 percent to root-zone	112.	113.	156.	154.	1271.	1051.	1454.	958.	122.	92.	91.	108.	5655.
Pumped irrigation water	0.	0.	0.	0.	5534.	9365.	11494.	9791.	5108.	1277.	0.	0.	42565.
38 percent to root-zone	0.	0.	0.	0.	2103.	3558.	4368.	3721.	1941.	485.	0.	0.	16176.
Precipitation on cropland	550.	2910.	2465.	493.	1575.	758.	168.	216.	1287.	794.	156.	493.	12286.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	1062.	3023.	2501.	647.	4949.	5367.	5990.	4895.	3349.	1371.	247.	601.	34101.
Potential consumptive use on irrigated cropland	171.	279.	371.	1432.	3900.	6500.	7970.	6836.	4275.	1166.	474.	237.	33612.
Supply minus use	891.	2744.	2230.	-785.	1049.	-1132.	-1980.	-1941.	-926.	205.	-227.	365.	489.
Cumulative soil moisture (maximum capacity-4,956 a.f.)	1677.	4620.	4956.	4171.	4956.	3824.	1844.	0.	0.	205.	0.	365.	
Consumptive use deficit	0.	0.	0.	0.	0.	0.	0.	-97.	-926.	0.	-23.	0.	-1046.
Actual consumptive use	171.	279.	371.	1432.	3900.	6500.	7970.	6738.	3349.	1166.	452.	237.	32567.
Addition to ground water	0.	0.	1894.	0.	264.	0.	0.	0.	0.	0.	0.	0.	2158.
Net water surface evaporation	0.	-4.	2.	14.	17.	25.	38.	37.	25.	14.	10.	1.	179.
M and I consumptive use	39.	47.	64.	80.	80.	90.	123.	123.	89.	64.	55.	47.	501.
Supply to wetland and ground water	488.	485.	2440.	724.	1515.	-526.	-1227.	-1722.	-1424.	-29.	467.	472.	1664.
Precipitation on wetland	133.	408.	346.	69.	221.	106.	24.	30.	181.	111.	22.	69.	1721.
Wetland consumptive use	28.	44.	59.	185.	268.	465.	684.	703.	480.	257.	109.	47.	3329.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													
Consumptive use by native vegetation in addition to precipitation	67.	67.	134.	268.	536.	938.	1407.	1407.	938.	536.	134.	134.	27062.
Outflow plus ground water storage change	526.	783.	2593.	340.	932.	-1822.	-3295.	-3802.	-2661.	-711.	247.	360.	-6510.
Ground water outflow	48.	48.	48.	47.	47.	47.	47.	47.	47.	48.	48.	48.	570.
Change in ground water storage	478.	735.	2545.	293.	885.	-1869.	-3342.	-3849.	-2708.	-759.	199.	312.	-7080.

TABLE 73.--Annual water budget, Minersville-Milford (2B-3, 4, 6), Beaver River Basin

	CALENDAR YEAR 1963												Annual
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	
	Acre-Feet												
Ground water inflow from other watersheds	196.	193.	198.	198.	196.	196.	196.	196.	198.	198.	198.	198.	2370.
Tributary inflow	73.	73.	97.	194.	559.	608.	292.	146.	122.	97.	97.	73.	2431.
Seepage and releases from Minersville Reservoir	304.	327.	455.	482.	2460.	2150.	2570.	1700.	440.	247.	219.	239.	11590.
Diversions to cropland	304.	327.	455.	482.	2460.	2150.	2570.	1700.	440.	247.	219.	239.	11590.
36 percent to root-zone	109.	118.	164.	174.	886.	774.	925.	612.	158.	89.	79.	86.	4172.
Pumped irrigation water	0.	0.	0.	0.	5380.	9105.	11174.	9519.	4966.	1242.	0.	0.	41386.
38 percent to root-zone	0.	0.	0.	0.	2044.	3460.	4246.	3617.	1887.	472.	0.	0.	15727.
Precipitation on cropland	72.	1311.	962.	950.	0.	1395.	216.	1599.	2044.	481.	1563.	168.	10763.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	182.	1428.	1126.	1124.	2930.	5629.	5388.	5829.	4090.	1042.	1642.	254.	30662.
Potential consumptive use on irrigated cropland	201.	352.	443.	997.	4942.	6403.	8893.	7291.	4585.	1417.	403.	225.	36151.
Supply minus use	-26.	1077.	683.	127.	-2012.	-774.	-3505.	-1462.	-495.	-375.	1239.	29.	-5489.
Cumulative soil moisture (maximum capacity-4,956 a.f.)	345.	1421.	2105.	2231.	220.	0.	0.	0.	0.	0.	1239.	1268.	
Consumptive use deficit	0.	0.	0.	0.	0.	-554.	-3505.	-1462.	-495.	-375.	0.	0.	-6392.
Actual consumptive use	201.	352.	443.	997.	4942.	5848.	5388.	5829.	4090.	1042.	403.	225.	29759.
Addition to ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Net water surface evaporation	2.	0.	6.	11.	26.	21.	43.	24.	16.	16.	6.	2.	173.
M and I consumptive use	39.	47.	64.	80.	80.	90.	123.	123.	89.	64.	55.	47.	901.
Supply to wetland and ground water	425.	433.	516.	610.	179.	-1391.	-2280.	-2334.	-1390.	-98.	374.	375.	-4582.
Precipitation on wetland	10.	184.	135.	133.	0.	196.	30.	224.	287.	67.	219.	24.	1510.
Wetland consumptive use	33.	55.	71.	129.	340.	458.	764.	750.	515.	313.	92.	45.	3563.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													
Consumptive use by native vegetation in addition to precipitation	47.	47.	94.	188.	376.	658.	987.	987.	658.	376.	94.	94.	23744.
Outflow plus ground water storage change	354.	515.	487.	427.	-536.	-2311.	-4000.	-3846.	-2276.	-720.	407.	260.	-11241.
Ground water outflow	48.	48.	48.	47.	47.	47.	47.	47.	47.	48.	48.	48.	570.
Change in ground water storage	306.	467.	439.	380.	-583.	-2358.	-4047.	-3893.	-2323.	-768.	359.	213.	-11811.

TABLE 74 .--Annual water budget, Minersville-Milford (2B-3, 4, 6), Beaver River Basin

	CALENDAR YEAR 1964												
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Ground water inflow from other watersheds	198.	158.	198.	198.	196.	196.	196.	196.	198.	198.	198.	198.	2370.
Tributary inflow	97.	97.	129.	258.	743.	808.	388.	194.	162.	129.	128.	97.	3231.
Seepage and releases from Minersville Reservoir	260.	259.	370.	403.	2290.	2140.	3380.	2180.	643.	260.	196.	229.	12610.
Diversions to cropland	260.	259.	370.	403.	2290.	2140.	3380.	2180.	643.	260.	196.	229.	12610.
36 percent to root zone	94.	93.	133.	145.	824.	770.	1217.	785.	231.	93.	71.	82.	4540.
Pumped irrigation water	0.	0.	0.	0.	5777.	9776.	11998.	10221.	5333.	1333.	0.	0.	44438.
38 percent to root zone	0.	0.	0.	0.	2195.	3715.	4559.	3884.	2027.	507.	0.	0.	16886.
Precipitation on cropland	265.	204.	1287.	2153.	577.	926.	241.	1215.	986.	84.	1251.	1203.	10390.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root zone supply	358.	298.	1420.	2298.	3597.	5411.	6017.	5883.	3244.	684.	1321.	1285.	31816.
Potential consumptive use on irrigated cropland	215.	226.	352.	1046.	3829.	6330.	9117.	6903.	3658.	1247.	279.	283.	33484.
Supply minus use	143.	72.	1068.	1251.	-232.	-919.	-3101.	-1020.	-414.	-563.	1042.	1002.	-1669.
Cumulative soil moisture (maximum capacity-4,956 a.f.)	1412.	1484.	2552.	3803.	3571.	2652.	0.	0.	0.	0.	1042.	2045.	
Consumptive use deficit	0.	0.	0.	0.	0.	0.	-449.	-1020.	-414.	-563.	0.	0.	-2446.
Actual consumptive use	215.	226.	352.	1046.	3829.	6330.	8668.	5883.	3244.	684.	279.	283.	31039.
Addition to ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Net water surface evaporation	1.	3.	5.	7.	18.	21.	38.	27.	19.	16.	7.	-1.	161.
M and I consumptive use	39.	47.	64.	80.	80.	90.	123.	123.	89.	64.	55.	47.	901.
Supply to wetland and ground water	421.	411.	495.	627.	111.	-1452.	-1973.	-2249.	-1363.	-93.	389.	395.	-4277.
Precipitation on wetland	37.	29.	181.	302.	81.	130.	34.	170.	138.	12.	175.	169.	1458.
Wetland consumptive use	36.	36.	56.	135.	263.	453.	783.	710.	411.	275.	64.	56.	3277.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													22927.
Consumptive use by native vegetation in addition to precipitation	53.	53.	106.	212.	424.	742.	1113.	1113.	742.	424.	106.	106.	5194.
Outflow plus ground water storage change	369.	351.	513.	582.	-495.	-2517.	-3835.	-3901.	-2378.	-781.	395.	402.	-11295.
Ground water outflow	48.	48.	48.	47.	47.	47.	47.	47.	47.	48.	48.	48.	570.
Change in ground water storage	321.	303.	465.	535.	-542.	-2564.	-3882.	-3948.	-2425.	-829.	347.	354.	-11865.

TABLE 75.---Annual water budget, Minersville-Milford (2B-3, 4, 6), Beaver, River Basin

	CALENDAR YEAR 1965												
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Ground water inflow from other watersheds	198.	198.	198.	198.	196.	196.	196.	196.	198.	198.	198.	198.	2370.
Tributary inflow	134.	134.	179.	358.	1030.	1120.	538.	269.	224.	179.	179.	134.	4469.
Seepage and releases from Minersville Reservoir	267.	298.	359.	420.	2710.	2770.	3740.	2960.	1570.	250.	270.	337.	15960.
Diversions to cropland	267.	298.	359.	420.	2710.	2770.	3740.	2960.	1570.	250.	270.	337.	15960.
36 percent to root-zone	96.	107.	129.	151.	976.	997.	1346.	1066.	565.	90.	97.	121.	5746.
Pumped irrigation water	0.	0.	0.	0.	4577.	7746.	9506.	8093.	4225.	1056.	0.	0.	35208.
38 percent to root-zone	0.	0.	0.	0.	1739.	2943.	3612.	3077.	1605.	401.	0.	0.	13379.
Precipitation on cropland	385.	1118.	661.	1936.	1395.	192.	665.	722.	1864.	60.	1275.	1840.	12133.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	481.	1226.	791.	2087.	4110.	4133.	5644.	4864.	4035.	551.	1372.	1961.	31258.
Potential consumptive use on irrigated cropland	280.	271.	432.	1209.	3568.	5974.	8317.	6481.	3115.	1155.	511.	251.	31565.
Supply minus use	201.	954.	358.	878.	542.	-1841.	-2673.	-1617.	919.	-603.	861.	1710.	-307.
Cumulative soil moisture (maximum capacity-4,956 a.f.)	2245.	3200.	3558.	4437.	4956.	3115.	442.	0.	919.	316.	1178.	2887.	
Consumptive use deficit	0.	0.	0.	0.	0.	0.	0.	-1175.	0.	0.	0.	0.	-1175.
Actual consumptive use	280.	271.	432.	1209.	3568.	5974.	8317.	5306.	3115.	1155.	511.	251.	30390.
Addition to ground water	0.	0.	0.	0.	22.	0.	0.	0.	0.	0.	0.	0.	22.
Net water surface evaporation	1.	1.	7.	7.	15.	22.	30.	26.	11.	16.	7.	-2.	140.
M and I consumptive use	39.	47.	64.	80.	80.	90.	123.	123.	89.	64.	55.	47.	901.
Supply to wetland and ground water	463.	475.	526.	708.	1149.	93.	-638.	-866.	-279.	56.	483.	503.	2655.
Precipitation on wetland	54.	157.	93.	272.	196.	27.	96.	101.	262.	8.	179.	258.	1702.
Wetland consumptive use	46.	43.	69.	156.	245.	427.	714.	667.	350.	255.	117.	50.	3138.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													26763.
Consumptive use by native vegetation in addition to precipitation													
	68.	68.	136.	272.	544.	952.	1428.	1428.	952.	544.	136.	136.	6664.
Outflow plus ground water storage change	402.	521.	424.	582.	555.	-1319.	-2684.	-2860.	-1319.	-734.	414.	575.	-5443.
Ground water outflow	48.	48.	48.	47.	47.	47.	47.	47.	47.	48.	48.	48.	570.
Change in ground water storage	354.	473.	376.	535.	508.	-1366.	-2731.	-2907.	-1366.	-782.	366.	527.	-6013.

TABLE 76. Representative potential consumptive use (calendar year 1961), Summit (2B1-1a, 3a), Beaver River Basin

Land use	Acres	MONTHLY CONSUMPTIVE USE, Inches												Annual Use	
		Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Inches	Acre-Feet
		Irrigated Cropland													
Alfalfa	545	.21	.43	.44	.90	4.73	5.25	7.37	6.29	4.32	1.67	.40	.24	32.26	1,465
Small grain	401	.13	.27	.28	.80	4.20	5.94	5.04	1.46	1.09	.71	.25	.15	20.33	679
Corn	37	.13	.27	.28	.42	1.71	2.79	6.04	6.23	4.49	.71	.25	.15	23.47	72
Pasture	162	.21	.43	.44	1.29	3.94	4.27	6.11	5.30	3.79	2.24	.43	.24	28.70	387
Suburban crops	80	.21	.43	.44	1.29	3.94	4.27	6.11	5.30	3.79	2.24	.43	.24	28.70	191
Total use	1,225	.19	.37	.38	.93	4.31	5.21	6.32	4.51	3.16	1.44	.35	.21	27.38 ^a	2,795
Consumptive Use of Precipitation															
Idle land	3,514													14.82	4,340
Native vegetation	7,599													14.82	9,385
Town and community areas	161													14.82	199
Water Surface Evaporation															
Net evaporation	13	0	.92	-.92	2.76	6.46	8.31	7.38	2.77	4.62	2.77	2.77	0	37.81	41
GRAND TOTAL	12,512													16.07 ^a	16,759

^aWeighted value.

TABLE 77.---Annual water budget, Summit (2B1-1a, 3a), Beaver River Basin

	CALENDAR YEAR 1956												Annual
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	
Acre-Feet													
Ground water inflow from other watersheds	291.	291.	292.	292.	292.	292.	292.	292.	292.	292.	291.	291.	3500.
Tributary inflow	78.	81.	147.	337.	721.	241.	141.	78.	56.	69.	53.	54.	2057.
Diversions to cropland	58.	61.	110.	253.	541.	181.	106.	58.	42.	52.	40.	40.	1543.
25 percent to root-zone	15.	15.	28.	63.	135.	45.	26.	15.	10.	13.	10.	10.	386.
Pumped irrigation water	0.	0.	0.	0.	189.	648.	810.	648.	405.	0.	0.	0.	2700.
36 percent to root-zone	0.	0.	0.	0.	68.	233.	292.	233.	146.	0.	0.	0.	972.
Precipitation on cropland	147.	102.	21.	89.	177.	76.	87.	23.	10.	53.	20.	28.	832.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	162.	117.	48.	152.	381.	355.	405.	271.	167.	66.	30.	38.	2190.
Potential consumptive use on irrigated cropland	30.	20.	51.	119.	392.	659.	636.	441.	340.	125.	29.	23.	2865.
Supply minus use	132.	97.	-3.	33.	-11.	-304.	-232.	-170.	-173.	-60.	1.	15.	-675.
Cumulative soil moisture (maximum capacity-440 a.f.)	223.	320.	318.	350.	339.	35.	0.	0.	0.	0.	1.	15.	
Consumptive use deficit	0.	0.	0.	0.	0.	0.	-197.	-170.	-173.	-60.	0.	0.	-600.
Actual consumptive use	30.	20.	51.	119.	392.	659.	439.	271.	167.	66.	29.	23.	2265.
Addition to ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Net water surface evaporation	-1.	0.	3.	3.	6.	10.	8.	8.	8.	4.	3.	1.	55.
M and I consumptive use	1.	2.	2.	3.	3.	3.	5.	4.	3.	2.	2.	2.	32.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													7657.
Consumptive use by native vegetation in addition to precipitation	20.	20.	40.	80.	160.	280.	420.	420.	280.	160.	40.	40.	1960.
Outflow plus ground water storage change	334.	335.	367.	479.	641.	-38.	-318.	-310.	-99.	182.	289.	292.	2152.
Ground water outflow	259.	259.	258.	258.	258.	258.	258.	258.	258.	258.	259.	259.	3100.
Change in ground water storage	75.	76.	109.	221.	383.	-296.	-576.	-568.	-357.	-76.	30.	33.	-948.

TABLE 78. ---Annual water budget, Summit (2Bl-1a, 3a), Beaver River Basin

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Ground water inflow from other watersheds	291.	291.	292.	292.	292.	292.	292.	292.	292.	292.	291.	291.	3500.
Tributary inflow	60.	83.	106.	285.	1022.	1236.	235.	133.	86.	144.	146.	108.	3643.
Diversions to cropland	45.	62.	79.	214.	766.	927.	176.	100.	64.	108.	109.	81.	2732.
25 percent to root-zone	11.	16.	20.	53.	192.	232.	44.	25.	16.	27.	27.	20.	683.
Pumped irrigation water	0.	0.	0.	0.	147.	504.	630.	504.	315.	0.	0.	0.	2100.
36 percent to root-zone	0.	0.	0.	0.	53.	181.	227.	181.	113.	0.	0.	0.	756.
Precipitation on cropland	262.	25.	169.	201.	242.	110.	93.	128.	5.	246.	203.	42.	1727.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	273.	40.	189.	254.	487.	524.	364.	334.	135.	273.	230.	63.	3166.
Potential consumptive use on irrigated cropland	21.	33.	47.	104.	308.	627.	626.	459.	302.	110.	25.	25.	2687.
Supply minus use	252.	7.	142.	150.	179.	-103.	-262.	-125.	-167.	164.	206.	37.	479.
Cumulative soil moisture (maximum capacity-440 a.f.)	268.	275.	417.	440.	440.	337.	74.	0.	0.	164.	369.	407.	
Consumptive use deficit	0.	0.	0.	0.	0.	0.	0.	-51.	-167.	0.	0.	0.	-218.
Actual consumptive use	21.	33.	47.	104.	308.	627.	626.	408.	135.	110.	25.	25.	2469.
Addition to ground water	0.	0.	0.	127.	179.	0.	0.	0.	0.	0.	0.	0.	306.
Net water surface evaporation	-2.	1.	1.	2.	3.	6.	7.	6.	6.	1.	2.	0.	33.
M and I consumptive use	1.	2.	2.	3.	3.	3.	5.	4.	3.	2.	2.	2.	32.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													15896.
Consumptive use by native vegetation in addition to precipitation	36.	36.	72.	144.	288.	504.	756.	756.	504.	288.	72.	72.	3528.
Outflow plus ground water storage change	305.	319.	303.	501.	954.	602.	-512.	-548.	-264.	118.	334.	304.	2417.
Ground water outflow	259.	259.	258.	258.	258.	258.	258.	258.	258.	258.	259.	259.	3100.
Change in ground water storage	46.	60.	45.	243.	696.	344.	-770.	-806.	-522.	-140.	75.	45.	-683.

TABLE 79 .--Annual water budget, Summit (2B1-1a, 3a), Beaver River Basin

CALENDAR YEAR 1958

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Ground water inflow from other watersheds	291.	291.	292.	292.	292.	292.	292.	292.	292.	292.	291.	291.	3500.
Tributary inflow	89.	107.	105.	440.	3055.	717.	179.	145.	200.	93.	80.	79.	5289.
Diversions to cropland	67.	80.	79.	330.	2291.	538.	134.	109.	150.	70.	60.	59.	3967.
25 percent to root-zone	17.	20.	20.	82.	573.	134.	34.	27.	38.	17.	15.	15.	992.
Pumped irrigation water	0.	0.	0.	0.	154.	528.	660.	528.	330.	0.	0.	0.	2200.
36 percent to root-zone	0.	0.	0.	0.	55.	190.	238.	190.	119.	0.	0.	0.	792.
Precipitation on cropland	147.	170.	210.	27.	111.	0.	15.	136.	157.	23.	97.	3.	1097.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	164.	190.	230.	109.	740.	325.	287.	353.	313.	40.	112.	18.	2881.
Potential consumptive use on irrigated cropland	22.	33.	32.	107.	445.	643.	620.	519.	306.	144.	36.	35.	2941.
Supply minus use	142.	157.	198.	2.	294.	-318.	-333.	-165.	7.	-104.	76.	-17.	-61.
Cumulative soil moisture (maximum capacity-440 a.f.)	440.	440.	440.	440.	440.	122.	0.	0.	7.	0.	76.	59.	
Consumptive use deficit	0.	0.	0.	0.	0.	0.	-211.	-165.	0.	-97.	0.	0.	-474.
Actual consumptive use	22.	33.	32.	107.	445.	643.	408.	353.	306.	47.	36.	35.	2467.
Addition to ground water	109.	157.	198.	2.	294.	0.	0.	0.	0.	0.	0.	0.	761.
Net water surface evaporation	-1.	-1.	1.	4.	6.	10.	11.	6.	5.	4.	3.	1.	50.
M and I consumptive use	1.	2.	2.	3.	3.	3.	5.	4.	3.	2.	2.	2.	32.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													10099.
Consumptive use by native vegetation in addition to precipitation	50.	50.	106.	206.	400.	700.	1050.	1050.	700.	400.	100.	100.	4900.
Outflow plus ground water storage change	422.	484.	473.	445.	2604.	-29.	-866.	-840.	-373.	-39.	251.	252.	2784.
Ground water outflow	259.	259.	258.	258.	258.	258.	258.	258.	258.	258.	259.	259.	3100.
Change in ground water storage	163.	225.	215.	187.	2346.	-287.	-1126.	-1098.	-631.	-297.	-8.	-7.	-316.

TABLE 80 .--Annual water budget, Summit (2B1-1a, 3a), Beaver River Basin

	CALENDAR YEAR 1959												
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Ground water inflow from other watersheds	291.	291.	292.	292.	292.	292.	292.	292.	292.	292.	291.	291.	3500.
Tributary inflow	71.	66.	118.	277.	241.	115.	69.	266.	59.	61.	57.	53.	1454.
Diversions to cropland	53.	49.	88.	208.	181.	86.	52.	199.	44.	46.	43.	40.	1090.
25 percent to root-zone	13.	12.	22.	52.	45.	22.	13.	50.	11.	11.	11.	10.	273.
Pumped irrigation water	0.	0.	0.	0.	168.	576.	720.	576.	360.	0.	0.	0.	2400.
36 percent to root-zone	0.	0.	0.	0.	60.	207.	259.	207.	130.	0.	0.	0.	864.
Precipitation on cropland	45.	244.	38.	56.	29.	14.	82.	119.	39.	55.	24.	101.	846.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	59.	257.	60.	108.	135.	243.	355.	376.	180.	66.	34.	111.	1983.
Potential consumptive use on irrigated cropland	25.	23.	48.	143.	351.	701.	734.	472.	274.	131.	40.	23.	2965.
Supply minus use	34.	233.	12.	-36.	-217.	-458.	-380.	-96.	-94.	-65.	-5.	88.	-982.
Cumulative soil moisture (maximum capacity-440 a.f.)	93.	327.	339.	303.	86.	0.	0.	0.	0.	0.	0.	88.	
Consumptive use deficit	0.	0.	0.	0.	0.	-371.	-380.	-96.	-94.	-65.	-5.	0.	-1010.
Actual consumptive use	25.	23.	48.	143.	351.	330.	355.	376.	180.	66.	34.	23.	1955.
Addition to ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Net water surface evaporation	0.	-1.	3.	5.	7.	10.	10.	7.	6.	4.	3.	0.	50.
M and I consumptive use	1.	2.	2.	3.	3.	3.	5.	4.	3.	2.	2.	2.	32.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													7788.
Consumptive use by native vegetation in addition to precipitation	14.	14.	28.	56.	112.	196.	294.	294.	196.	112.	28.	28.	1372.
Outflow plus ground water storage change	333.	330.	355.	453.	305.	-31.	-220.	-4.	5.	224.	304.	304.	2363.
Ground water outflow	259.	259.	258.	258.	258.	258.	258.	258.	258.	258.	259.	259.	3100.
Change in ground water storage	74.	71.	97.	195.	47.	-289.	-478.	-262.	-253.	-34.	45.	45.	-737.

TABLE 81.---Annual water budget, Summit (2B1-1a, 3a), Beaver River Basin

CALENDAR YEAR 1960

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Ground water inflow from other watersheds	291.	291.	292.	292.	292.	292.	292.	292.	292.	292.	291.	291.	3500.
Tributary inflow	64.	63.	159.	368.	484.	142.	70.	54.	77.	84.	114.	65.	1745.
Diversions to cropland	48.	47.	119.	276.	363.	106.	52.	40.	58.	63.	85.	49.	1309.
25 percent to root-zone	12.	12.	30.	69.	91.	27.	13.	10.	14.	16.	21.	12.	327.
Pumped irrigation water	0.	0.	0.	0.	182.	624.	780.	624.	390.	0.	0.	0.	2600.
36 percent to root-zone	0.	0.	0.	0.	66.	225.	281.	225.	140.	0.	0.	0.	936.
Precipitation on cropland	15.	65.	101.	56.	43.	0.	37.	11.	48.	152.	78.	106.	713.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	27.	77.	131.	125.	200.	251.	331.	246.	203.	167.	100.	118.	1977.
Potential consumptive use on irrigated cropland	19.	22.	58.	136.	400.	687.	723.	509.	346.	123.	40.	22.	3085.
Supply minus use	8.	55.	73.	-11.	-201.	-436.	-392.	-263.	-143.	45.	60.	97.	-1109.
Cumulative soil moisture (maximum capacity-440 a.f.)	96.	150.	223.	212.	11.	0.	0.	0.	0.	45.	104.	201.	
Consumptive use deficit	0.	0.	0.	0.	0.	-425.	-392.	-263.	-143.	0.	0.	0.	-1222.
Actual consumptive use	19.	22.	58.	136.	400.	262.	331.	246.	203.	123.	40.	22.	1863.
Addition to ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Net water surface evaporation	1.	1.	2.	5.	8.	11.	11.	9.	6.	3.	3.	0.	58.
M and I consumptive use	1.	2.	2.	3.	3.	3.	5.	4.	3.	2.	2.	2.	32.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													6567.
Consumptive use by native vegetation in addition to precipitation	17.	17.	34.	68.	136.	238.	357.	357.	238.	136.	34.	34.	1666.
Outflow plus ground water storage change													
Ground water outflow	324.	323.	383.	515.	473.	-69.	-305.	-259.	-33.	219.	345.	308.	2226.
	259.	259.	258.	258.	258.	258.	258.	258.	258.	258.	259.	259.	3100.
Change in ground water storage	65.	64.	125.	257.	215.	-327.	-563.	-517.	-291.	-39.	86.	49.	-874.

TABLE 82. --Annual water budget, Summit (2B1-1a, 3a), Beaver River Basin

	CALENDAR YEAR 1961												
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Ground water inflow from other watersheds	291.	291.	292.	292.	292.	292.	292.	292.	292.	292.	291.	291.	3500.
Tributary inflow	65.	64.	112.	389.	571.	172.	93.	267.	235.	73.	62.	65.	2170.
Diversions to cropland	49.	48.	84.	292.	428.	129.	70.	200.	176.	55.	46.	49.	1627.
25 percent to root-zone	12.	12.	21.	73.	107.	32.	17.	50.	44.	14.	12.	12.	407.
Pumped irrigation water	0.	0.	0.	0.	140.	480.	600.	480.	300.	0.	0.	0.	2000.
36 percent to root-zone	0.	0.	0.	0.	50.	173.	216.	173.	108.	0.	0.	0.	720.
Precipitation on cropland	61.	30.	391.	145.	74.	15.	110.	226.	54.	49.	63.	89.	1307.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	73.	42.	412.	218.	232.	221.	344.	449.	206.	63.	75.	101.	2434.
Potential consumptive use on irrigated cropland	18.	26.	45.	124.	392.	747.	750.	525.	258.	106.	24.	20.	3036.
Supply minus use	55.	16.	366.	94.	-160.	-526.	-407.	-77.	-53.	-43.	50.	81.	-602.
Cumulative soil moisture (maximum capacity-440 a.f.)	256.	272.	440.	440.	280.	0.	0.	0.	0.	0.	50.	131.	
Consumptive use deficit	0.	0.	0.	0.	0.	-247.	-407.	-77.	-53.	-43.	0.	0.	-825.
Actual consumptive use	18.	26.	45.	124.	392.	500.	344.	449.	206.	63.	24.	20.	2211.
Addition to ground water	0.	0.	198.	94.	0.	0.	0.	0.	0.	0.	0.	0.	292.
Net water surface evaporation	0.	1.	-1.	3.	7.	9.	8.	3.	5.	3.	3.	0.	43.
M and I consumptive use	1.	2.	2.	3.	3.	3.	5.	4.	3.	2.	2.	2.	32.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													12035.
Consumptive use by native vegetation in addition to precipitation	21.	21.	42.	84.	168.	294.	441.	441.	294.	168.	42.	42.	2058.
Outflow plus ground water storage change	322.	319.	538.	612.	527.	-47.	-303.	-112.	73.	178.	294.	300.	2703.
Ground water outflow	259.	259.	258.	258.	258.	258.	258.	258.	258.	258.	259.	259.	3100.
Change in ground water storage	63.	60.	280.	354.	269.	-305.	-561.	-370.	-185.	-80.	35.	41.	-397.

TABLE 83.--Annual water budget, Summit (2B1-1a, 3a), Beaver River Basin

CALENDAR YEAR 1962													
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Ground water inflow from other watersheds	291.	291.	292.	292.	292.	292.	292.	292.	292.	292.	291.	291.	3500.
Tributary inflow	70.	98.	125.	1078.	1177.	454.	198.	99.	99.	77.	71.	59.	3608.
Diversions to cropland	52.	73.	94.	808.	883.	340.	148.	74.	74.	58.	53.	44.	2706.
25 percent to root-zone	13.	18.	23.	202.	221.	85.	37.	19.	19.	14.	13.	11.	676.
Pumped irrigation water	0.	0.	0.	0.	154.	528.	660.	528.	330.	0.	0.	0.	2200.
36 percent to root-zone	0.	0.	0.	0.	55.	190.	238.	190.	119.	0.	0.	0.	792.
Precipitation on cropland	105.	267.	264.	123.	126.	58.	21.	7.	152.	65.	61.	94.	1341.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	118.	285.	287.	325.	402.	333.	295.	216.	289.	79.	74.	105.	2810.
Potential consumptive use on irrigated cropland	19.	25.	30.	158.	326.	581.	611.	45.	317.	131.	49.	24.	2318.
Supply minus use	99.	260.	257.	167.	76.	-248.	-316.	170.	-28.	-52.	25.	81.	492.
Cumulative soil moisture (maximum capacity-440 a.f.)	231.	440.	440.	440.	440.	192.	0.	170.	142.	91.	115.	196.	
Consumptive use deficit	0.	0.	0.	0.	0.	0.	-124.	0.	0.	0.	0.	0.	-124.
Actual consumptive use	19.	25.	30.	158.	326.	581.	488.	45.	317.	131.	49.	24.	2194.
Addition to ground water	0.	51.	257.	167.	76.	0.	0.	0.	0.	0.	0.	0.	551.
Net water surface evaporation	0.	-2.	0.	3.	6.	8.	10.	9.	6.	4.	3.	0.	48.
M and I consumptive use	1.	2.	2.	3.	3.	3.	5.	4.	3.	2.	2.	2.	32.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													12345
Consumptive use by native vegetation in addition to precipitation	36.	36.	72.	144.	288.	504.	756.	756.	504.	288.	72.	72.	3528.
Outflow plus ground water storage change	311.	385.	577.	1184.	971.	-44.	-556.	-587.	-260.	61.	272.	275.	2583.
Ground water outflow	259.	259.	258.	258.	258.	258.	258.	258.	258.	258.	259.	259.	3100.
Change in ground water storage	52.	126.	319.	926.	713.	-302.	-814.	-845.	-518.	-197.	13.	16.	-517.

TABLE 84.--Annual water budget, Summit (2B1-1a, 3a), Beaver River Basin

	CALENDAR YEAR 1963												
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Ground water inflow from other watersheds	291.	291.	292.	292.	292.	292.	292.	292.	292.	292.	291.	291.	3500.
Tributary inflow	65.	90.	99.	219.	585.	127.	70.	155.	148.	69.	78.	58.	1766.
Diversions to cropland	49.	67.	74.	164.	439.	95.	52.	116.	111.	52.	58.	43.	1324.
25 percent to root-zone	12.	17.	19.	41.	110.	24.	13.	29.	28.	13.	15.	11.	331.
Pumped irrigation water	0.	0.	0.	0.	168.	576.	720.	576.	360.	0.	0.	0.	2400.
36 percent to root-zone	0.	0.	0.	0.	60.	207.	259.	207.	130.	0.	0.	0.	864.
Precipitation on cropland	42.	165.	121.	171.	0.	58.	258.	269.	160.	66.	175.	28.	1513.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	54.	182.	139.	212.	170.	289.	530.	506.	317.	79.	190.	39.	2708.
Potential consumptive use on irrigated cropland	19.	38.	39.	95.	440.	532.	645.	461.	323.	147.	36.	21.	2795.
Supply minus use	35.	144.	100.	117.	-270.	-243.	-115.	45.	-6.	-68.	154.	18.	-88.
Cumulative soil moisture (maximum capacity-440 a.f.)	232.	376.	440.	440.	170.	0.	0.	45.	39.	0.	154.	171.	
Consumptive use deficit	0.	0.	0.	0.	0.	-73.	-115.	0.	0.	-29.	0.	0.	-217.
Actual consumptive use	19.	38.	39.	95.	440.	459.	530.	461.	323.	118.	36.	21.	2579.
Addition to ground water	0.	0.	36.	117.	0.	0.	0.	0.	0.	0.	0.	0.	153.
Net water surface evaporation	0.	-1.	2.	2.	9.	8.	9.	4.	4.	4.	2.	1.	43.
M and I consumptive use	1.	2.	2.	3.	3.	3.	5.	4.	3.	2.	2.	2.	32.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													13923.
Consumptive use by native vegetation in addition to precipitation													
Outflow plus ground water storage change	18.	18.	36.	72.	144.	252.	378.	378.	252.	144.	36.	36.	1764.
Ground water outflow	325.	345.	369.	510.	551.	-75.	-302.	-175.	24.	198.	315.	300.	2385.
	259.	259.	258.	258.	258.	258.	258.	258.	258.	258.	259.	259.	3100.
Change in ground water storage	66.	86.	111.	252.	293.	-333.	-560.	-433.	-234.	-60.	56.	41.	-715.

TABLE 85.--Annual water budget, Summit (2B1-1a, 3a), Beaver River Basin

CALENDAR YEAR 1964

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Ground water inflow from other watersheds	291.	291.	292.	292.	292.	292.	292.	292.	292.	292.	291.	291.	3500.
Tributary inflow	61.	65.	120.	318.	1164.	375.	153.	197.	66.	59.	68.	74.	2722.
Diversions to cropland	46.	49.	90.	238.	873.	281.	115.	148.	49.	44.	51.	55.	2041.
25 percent to root-zone	11.	12.	22.	60.	218.	70.	29.	37.	12.	11.	13.	14.	510.
Pumped irrigation water	0.	0.	0.	0.	168.	576.	720.	576.	360.	0.	0.	0.	2400.
36 percent to root-zone	0.	0.	0.	0.	60.	207.	259.	207.	130.	0.	0.	0.	864.
Precipitation on cropland	35.	37.	179.	177.	40.	47.	46.	150.	104.	5.	117.	140.	1078.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	46.	49.	202.	237.	319.	325.	334.	394.	246.	16.	129.	154.	2453.
Potential consumptive use on irrigated cropland	20.	20.	30.	98.	332.	563.	673.	441.	265.	143.	26.	22.	2633.
Supply minus use	26.	29.	172.	139.	-14.	-238.	-338.	-47.	-19.	-127.	104.	132.	-180.
Cumulative soil moisture (maximum capacity-440 a.f.)	198.	227.	399.	440.	426.	188.	0.	0.	0.	0.	104.	235.	
Consumptive use deficit	0.	0.	0.	0.	0.	0.	-150.	-47.	-19.	-127.	0.	0.	-343.
Actual consumptive use	20.	20.	30.	98.	332.	563.	523.	394.	246.	16.	26.	22.	2290.
Addition to ground water	0.	0.	0.	98.	0.	0.	0.	0.	0.	0.	0.	0.	98.
Net water surface evaporation	0.	1.	1.	2.	6.	7.	10.	6.	5.	4.	2.	-1.	44.
M and I consumptive use	1.	2.	2.	3.	3.	3.	5.	4.	3.	2.	2.	2.	32.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													9921.
Consumptive use by native vegetation in addition to precipitation	27.	27.	54.	108.	216.	378.	567.	567.	378.	216.	54.	54.	2646.
Outflow plus ground water storage change	312.	314.	332.	536.	952.	1.	-425.	-332.	-170.	118.	288.	296.	2224.
Ground water outflow	259.	259.	258.	258.	258.	258.	258.	258.	258.	258.	259.	259.	3100.
Change in ground water storage	53.	55.	74.	278.	694.	-257.	-683.	-590.	-428.	-140.	29.	37.	-876.

TABLE 86. --Annual water budget, Summit (2B1-1a, 3a), Beaver River Basin

	CALENDAR YEAR 1965												
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Ground water inflow from other watersheds	291.	291.	292.	292.	292.	292.	292.	292.	292.	292.	291.	291.	3500.
Tributary inflow	88.	92.	106.	415.	1479.	1438.	383.	190.	173.	105.	108.	122.	4699.
Diversions to cropland	66.	69.	79.	311.	1109.	1078.	287.	142.	130.	79.	81.	91.	3524.
25 percent to root-zone	16.	17.	20.	78.	277.	270.	72.	36.	32.	20.	20.	23.	881.
Pumped irrigation water	0.	0.	0.	0.	154.	528.	660.	528.	330.	0.	0.	0.	2200.
36 percent to root-zone	0.	0.	0.	0.	55.	190.	238.	190.	119.	0.	0.	0.	792.
Precipitation on cropland	109.	199.	295.	169.	167.	68.	211.	170.	109.	16.	175.	177.	1867.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	126.	216.	315.	247.	500.	528.	521.	396.	261.	36.	196.	200.	3540.
Potential consumptive use on irrigated cropland	23.	23.	33.	105.	292.	507.	569.	421.	211.	134.	46.	24.	2388.
Supply minus use	103.	194.	282.	142.	208.	21.	-48.	-25.	49.	-98.	150.	176.	1152.
Cumulative soil moisture (maximum capacity-440 a.f.)	338.	440.	440.	440.	440.	440.	392.	367.	416.	318.	440.	440.	0.
Consumptive use deficit	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Actual consumptive use	23.	23.	33.	105.	292.	507.	569.	421.	211.	134.	46.	24.	2388.
Addition to ground water	0.	92.	282.	142.	208.	21.	0.	0.	0.	0.	28.	176.	948.
Net water surface evaporation	0.	-1.	0.	2.	5.	7.	6.	5.	5.	4.	2.	-1.	32.
M and I consumptive use	1.	2.	2.	3.	3.	3.	5.	4.	3.	2.	2.	2.	32.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													17183.
Consumptive use by native vegetation in addition to precipitation	46.	46.	92.	184.	368.	644.	966.	966.	644.	368.	92.	92.	4508.
Outflow plus ground water storage change	314.	410.	566.	582.	1270.	637.	-612.	-719.	-338.	3.	311.	473.	2901.
Ground water outflow	259.	259.	258.	258.	258.	258.	258.	258.	258.	258.	259.	259.	3100.
Change in ground water storage	55.	151.	308.	324.	1012.	379.	-870.	-977.	-596.	-255.	52.	214.	-199.

TABLE 37 .--Representative potential consumptive use (calendar year 1963), Parowan (2B1-1b, 3b, 3c), Beaver River Basin

Land Use	Acres	MONTHLY CONSUMPTIVE USE, Inches												Annual Use	
		Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Inches	Acre-Feet
		Irrigated Cropland													
Alfalfa	5,352	.21	.43	.44	.68	4.42	5.25	7.37	6.18	4.32	1.65	.40	.24	31.58	14,087
Small grain	1,886	.13	.27	.28	.53	2.93	5.06	8.43	2.74	1.09	.71	.25	.15	22.57	3,547
Corn	274	.13	.27	.28	.42	1.71	2.79	5.97	6.23	3.75	.71	.25	.15	22.67	518
Potatoes	31	.13	.27	.28	.42	1.14	2.18	6.04	7.63	5.97	.97	.25	.15	25.44 ^a	66
Hayland	121	.21	.43	.44	1.07	3.94	4.27	6.11	5.30	3.97	1.99	.40	.24	28.37	286
Pasture	561	.21	.43	.44	1.07	3.94	4.27	6.11	5.30	3.97	1.99	.40	.24	28.37	1,326
Suburban crops	400	.21	.43	.44	1.07	3.94	4.27	6.11	5.30	3.97	1.99	.40	.24	28.37	946
Total use	8,625	.19	.38	.40	.68	3.94	4.99	7.39	5.32	3.56	1.45	.37	.22	28.88	20,776
Wetlands (Phreatophytes)															
Meadow W1	60	.18	.34	.38	.64	1.80	2.18	3.32	2.97	2.18	1.36	.46	.23	16.03	80
Meadow W2	212	.30	.56	.59	.97	2.67	3.16	5.04	4.78	3.62	2.30	.78	.41	25.18	445
Meadow W3	45	.46	.90	.97	1.53	4.38	5.34	8.23	7.52	5.58	3.46	1.16	.58	40.11	150
Salt grass W1	392	.18	.34	.38	.64	1.80	2.18	3.32	2.97	2.18	1.36	.46	.23	16.03	524
Salt grass W2	1,217	.30	.56	.59	.97	2.67	3.16	5.04	4.78	3.62	2.30	.78	.41	25.18	2,553
Sage and rabbitbrush W1	1,751	.13	.27	.28	.42	1.09	1.49	2.92	3.03	2.53	1.36	.32	.15	14.00	2,043
Sage and rabbitbrush W2	250	.20	.41	.50	.80	2.32	3.85	7.30	7.58	5.89	3.26	.81	.25	33.18	691
Greasewood W1	1,145	.13	.27	.28	.42	1.09	1.49	2.92	3.03	2.53	1.36	.32	.15	14.00	1,336
Greasewood W2	500	.20	.41	.50	.80	2.32	3.85	7.30	7.58	5.89	3.26	.81	.25	33.18	1,382
Total use	5,572	.19	.37	.40	.64	1.75	2.32	4.13	4.12	3.26	1.88	.52	.24	19.82 ^a	9,204
Consumptive Use of Precipitation															
Idle land	9,019													13.64	10,251
Native vegetation	31,358													13.64	35,644
Town and community areas	5,891													13.64	3,520
Water Surface Evaporation ^b															
Net evaporation	102 ^b	.35	-.35	1.76	2.12	8.23	7.06	8.23	3.76	3.76	3.65	1.88	.58	41.03	347
GRAND TOTAL	60,567													16.43 ^a	82,918

^aWeighted value.
^bDoes not include Little Salt Lake.

TABLE 88 .---Annual water budget, Parowan (2B1-1b, 3b, 3c), Beaver River Basin

	CALENDAR YEAR 1956												Annual
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	
	Acre-Feet												
Tributary inflow	662.	662.	1168.	2720.	5983.	1987.	1193.	640.	463.	574.	441.	441.	16934.
Diversions to cropland	463.	463.	818.	1904.	4188.	1391.	835.	448.	324.	402.	309.	309.	11854.
20 percent to root-zone	93.	93.	164.	381.	838.	278.	167.	90.	65.	80.	62.	62.	2371.
Pumped irrigation water	0.	0.	0.	0.	896.	3072.	3840.	3072.	1920.	0.	0.	0.	12800.
34 percent to root-zone	0.	0.	0.	0.	305.	1044.	1306.	1044.	653.	0.	0.	0.	4352.
Precipitation on cropland	956.	662.	134.	575.	1150.	495.	561.	147.	67.	341.	127.	180.	5394.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	1049.	754.	297.	956.	2292.	1817.	2034.	1281.	784.	421.	189.	242.	12117.
Potential consumptive use													
on irrigated cropland	220.	148.	375.	619.	2522.	4449.	5243.	3659.	2690.	887.	210.	171.	21192.
Supply minus use	829.	607.	-78.	337.	-230.	-2632.	-3209.	-2377.	-1905.	-466.	-21.	72.	-9075.
Cumulative soil moisture													
(maximum capacity-3,101 a.f.)	1292.	1898.	1820.	2157.	1927.	0.	0.	0.	0.	0.	0.	72.	
Consumptive use deficit	0.	0.	0.	0.	0.	-704.	-3209.	-2377.	-1905.	-466.	-21.	0.	-8683.
Actual consumptive use	220.	148.	375.	619.	2522.	3744.	2034.	1281.	784.	421.	189.	171.	12509.
Addition to ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Net water surface evaporation	-5.	2.	22.	28.	50.	77.	66.	64.	64.	30.	28.	5.	438.
Net evaporation from Little Salt Lake	-51.	16.	215.	268.	475.	741.	636.	615.	614.	288.	264.	46.	4127.
M and I consumptive use	17.	20.	26.	33.	33.	36.	49.	49.	36.	27.	23.	20.	369.
Supply to wetland and ground water	609.	532.	741.	2010.	4283.	-190.	-1031.	-1222.	-969.	149.	65.	308.	5278.
Precipitation on wetland	618.	428.	86.	371.	743.	320.	363.	95.	43.	220.	82.	117.	3485.
Wetland consumptive use	141.	93.	242.	374.	723.	1335.	1892.	1830.	1592.	740.	193.	122.	9277.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													28936.
Consumptive use by native vegetation in addition to precipitation	56.	56.	113.	226.	461.	790.	1185.	1185.	790.	452.	112.	112.	5532.
Outflow plus ground water storage change													
Ground water outflow	1030.	811.	475.	1781.	3842.	-1995.	-3745.	-4142.	-3308.	-823.	-158.	191.	-6046.
	525.	525.	525.	525.	525.	525.	525.	525.	525.	525.	525.	525.	6300.
Change in ground water storage	505.	286.	-50.	1256.	3317.	-2520.	-4270.	-4667.	-3833.	-1348.	-683.	-334.	-12346.

TABLE 89 .---Annual water budget, Parowan (2B1-1b, 3b, 3c), Beaver River Basin

CALENDAR YEAR 1957													
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Tributary inflow	508.	684.	882.	2364.	8458.	10247.	1943.	1103.	706.	1193.	1215.	906.	30209.
Diversions to cropland	356.	479.	617.	1655.	5921.	7173.	1360.	772.	494.	835.	850.	634.	21146.
20 percent to root-zone	71.	96.	123.	331.	1184.	1435.	272.	154.	99.	167.	170.	127.	4229.
Pumped irrigation water	0.	0.	0.	0.	693.	2376.	2970.	2376.	1485.	0.	0.	0.	9900.
34 percent to root-zone	0.	0.	0.	0.	236.	808.	1010.	808.	505.	0.	0.	0.	3366.
Precipitation on cropland	1698.	160.	1096.	1303.	1571.	715.	602.	829.	33.	1598.	1317.	274.	11196.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	1769.	256.	1220.	1634.	2991.	2958.	1883.	1791.	637.	1765.	1487.	401.	18792.
Potential consumptive use													
on irrigated cropland	154.	245.	344.	543.	1983.	4233.	5157.	3812.	2389.	779.	180.	184.	20004.
Supply minus use	1615.	11.	876.	1092.	1007.	-1276.	-3274.	-2021.	-1751.	986.	1307.	217.	-1212.
Cumulative soil moisture													
(maximum capacity-3,101 a.f.)	1687.	1698.	2574.	3101.	3101.	1825.	0.	0.	0.	986.	2292.	2509.	
Consumptive use deficit	0.	0.	0.	0.	0.	0.	-1448.	-2021.	-1751.	0.	0.	0.	-5221.
Actual consumptive use	154.	245.	344.	543.	1983.	4233.	3709.	1791.	637.	779.	180.	184.	14782.
Addition to ground water	0.	0.	0.	565.	1007.	0.	0.	0.	0.	0.	0.	0.	1572.
Net water surface evaporation	-14.	8.	11.	18.	22.	50.	56.	50.	46.	7.	13.	4.	272.
Net evaporation from Little Salt Lake	-135.	73.	106.	172.	213.	480.	539.	482.	438.	70.	130.	36.	2604.
M and I consumptive use	17.	20.	26.	33.	33.	36.	49.	49.	36.	27.	23.	20.	369.
Supply to wetland and ground water	569.	488.	615.	2375.	7777.	7438.	17.	-441.	-417.	922.	878.	719.	20941.
Precipitation on wetland	1097.	104.	708.	842.	1015.	462.	389.	535.	22.	1032.	851.	177.	7233.
Wetland consumptive use	98.	153.	222.	328.	568.	1271.	1861.	1907.	1414.	650.	167.	131.	8771.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													60056.
Consumptive use by native vegetation in addition to precipitation	100.	100.	200.	400.	800.	1400.	2100.	2100.	1400.	800.	200.	200.	9800.
Outflow plus ground water storage change	1468.	339.	901.	2489.	7424.	5229.	-3555.	-3913.	-3209.	504.	1362.	565.	9603.
Ground water outflow	525.	525.	525.	525.	525.	525.	525.	525.	525.	525.	525.	525.	6300.
Change in ground water storage	943.	-186.	376.	1964.	6899.	4704.	-4080.	-4438.	-3734.	-21.	837.	40.	3303.

TABLE 90 --Annual water budget, Parowan (2B1-1b, 3b, 3c), Beaver River Basin

CALENDAR YEAR 1958

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Tributary inflow	728.	882.	862.	3644.	25327.	5940.	1478.	1215.	1656.	772.	662.	662.	43828.
Diversions to cropland	510.	617.	603.	2551.	17729.	4158.	1035.	850.	1159.	540.	463.	463.	30680.
20 percent to root-zone	102.	123.	121.	510.	3546.	832.	207.	170.	232.	108.	93.	93.	6136.
Pumped irrigation water	0.	0.	0.	0.	756.	2592.	3240.	2592.	1620.	0.	0.	0.	10800.
34 percent to root-zone	0.	0.	0.	0.	257.	881.	1102.	881.	551.	0.	0.	0.	3672.
Precipitation on cropland	956.	1103.	1364.	174.	722.	0.	100.	882.	1016.	147.	628.	20.	7112.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	1058.	1226.	1484.	684.	4525.	1713.	1409.	1934.	1799.	255.	721.	113.	16920.
Potential consumptive use													
on irrigated cropland	164.	243.	233.	556.	2865.	4340.	5106.	4307.	2425.	1021.	261.	254.	21775.
Supply minus use	894.	983.	1251.	128.	1659.	-2628.	-3697.	-2373.	-627.	-765.	460.	-141.	-4855.
Cumulative soil moisture													
(maximum capacity-3,101 a.f.)	3101.	3101.	3101.	3101.	3101.	473.	0.	0.	0.	0.	460.	318.	
Consumptive use deficit	0.	0.	0.	0.	0.	0.	-3224.	-2373.	-627.	-765.	0.	0.	-6988.
Actual consumptive use	164.	243.	233.	556.	2865.	4340.	1882.	1934.	1799.	255.	261.	254.	14787.
Addition to ground water	302.	983.	1251.	128.	1659.	0.	0.	0.	0.	0.	0.	0.	4324.
Net water surface evaporation	-5.	-4.	8.	33.	46.	78.	91.	45.	44.	35.	22.	7.	399.
Net evaporation from Little													
Salt Lake	-51.	-33.	76.	314.	442.	752.	870.	430.	421.	336.	208.	64.	3829.
M and I consumptive use	17.	20.	26.	33.	33.	36.	49.	49.	36.	27.	23.	20.	369.
Supply to wetland and													
ground water	967.	1758.	1882.	2883.	22662.	3361.	-840.	-360.	372.	266.	317.	479.	33746.
Precipitation on wetland	618.	713.	881.	112.	466.	0.	65.	570.	656.	95.	406.	13.	4595.
Wetland consumptive use	105.	152.	150.	335.	821.	1303.	1843.	2155.	1435.	852.	241.	181.	9574.
Precipitation and consumptive													
use on idle land, native													
vegetation and town and													
community areas													
Consumptive use by native													38153.
vegetation in addition													
to precipitation	146.	146.	292.	584.	1168.	2044.	3066.	3066.	2044.	1168.	292.	292.	14308.
Outflow plus ground water													
storage change	1334.	2173.	2321.	2076.	21139.	14.	-5684.	-5011.	-2451.	-1659.	190.	19.	14459.
Ground water outflow	525.	525.	525.	525.	525.	525.	525.	525.	525.	525.	525.	525.	6300.
Change in ground water storage	809.	1648.	1796.	1551.	20614.	-511.	-6209.	-5536.	-2976.	-2184.	-335.	-506.	8159.

TABLE 91 .--Annual water budget, Parowan (2B1-1b, 3b, 3c), Beaver River, Basin

	CALENDAR YEAR 1959												Annual
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	
	Acre-Feet												
Tributary inflow	596.	552.	971.	2296.	1987.	949.	574.	2208.	486.	508.	486.	441.	12054.
Diversions to cropland	417.	386.	680.	1607.	1391.	664.	402.	1546.	340.	356.	340.	309.	8438.
20 percent to root-zone	83.	77.	136.	321.	278.	133.	80.	309.	68.	71.	68.	62.	1688.
Pumped irrigation water	0.	0.	0.	0.	777.	2664.	3330.	2664.	1665.	0.	0.	0.	11100.
34 percent to root-zone	0.	0.	0.	0.	264.	906.	1132.	906.	566.	0.	0.	0.	3774.
Precipitation on cropland	294.	1584.	247.	361.	187.	94.	535.	769.	254.	354.	154.	655.	5488.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	378.	1661.	383.	682.	730.	1132.	1747.	1984.	888.	425.	222.	717.	10949.
Potential consumptive use													
on irrigated cropland	182.	172.	354.	744.	2260.	4734.	6050.	3917.	2166.	926.	288.	171.	21964.
Supply minus use	195.	1489.	30.	-62.	-1530.	-3601.	-4303.	-1933.	-1277.	-501.	-67.	546.	-11015.
Cumulative soil moisture													
(maximum capacity-3,101 a.f.)	514.	2003.	2033.	1971.	441.	0.	0.	0.	0.	0.	0.	546.	-11242.
Consumptive use deficit	0.	0.	0.	0.	0.	-3161.	-4303.	-1933.	-1277.	-501.	-67.	0.	10722.
Actual consumptive use	182.	172.	354.	744.	2260.	1573.	1747.	1984.	888.	425.	222.	171.	0.
Addition to ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	437.
Net water surface evaporation	2.	-9.	21.	39.	56.	80.	84.	57.	49.	32.	27.	-1.	
Net evaporation from Little Salt Lake	24.	-88.	203.	371.	538.	770.	810.	548.	473.	305.	261.	-7.	4208.
M and I consumptive use	17.	20.	26.	33.	33.	36.	49.	49.	36.	27.	23.	20.	369.
Supply to wetland and ground water	469.	552.	585.	1532.	818.	-976.	-1582.	339.	-706.	73.	107.	367.	1578.
Precipitation on wetland	190.	1023.	160.	233.	121.	60.	345.	497.	164.	229.	99.	423.	3545.
Wetland consumptive use	117.	108.	228.	449.	648.	1421.	2184.	1960.	1282.	773.	266.	122.	9557.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													29436.
Consumptive use by native vegetation in addition to precipitation	40.	40.	80.	160.	320.	560.	840.	840.	560.	320.	80.	80.	3920.
Outflow plus ground water storage change	502.	1427.	437.	1156.	-29.	-2897.	-4261.	-1964.	-2384.	-791.	-140.	588.	-8354.
Ground water outflow	525.	525.	525.	525.	525.	525.	525.	525.	525.	525.	525.	525.	6300.
Change in ground water storage	-23.	902.	-88.	631.	-554.	-3422.	-4786.	-2489.	-2909.	-1316.	-665.	63.	-14654.

TABLE 92 .--Annual water budget, Parowan (2B1-1b, 3b, 3c), Beaver River Basin													
	CALENDAR YEAR 1960												
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Tributary inflow	529.	529.	1326.	3048.	3997.	1171.	574.	441.	640.	706.	949.	552.	14462.
Diversions to cropland	370.	370.	928.	2134.	2798.	820.	402.	309.	448.	494.	664.	386.	10123.
20 percent to root-zone	74.	74.	186.	427.	560.	164.	80.	62.	90.	99.	133.	77.	2025.
Pumped irrigation water	0.	0.	0.	0.	847.	2904.	3630.	2904.	1815.	0.	0.	0.	12100.
34 percent to root-zone	0.	0.	0.	0.	288.	987.	1234.	987.	617.	0.	0.	0.	4114.
Precipitation on cropland	100.	421.	655.	361.	281.	0.	241.	74.	314.	983.	508.	688.	4626.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	174.	495.	841.	788.	1128.	1151.	1555.	1123.	1021.	1081.	641.	766.	10764.
Potential consumptive use													
on irrigated cropland	141.	164.	429.	707.	2576.	4638.	5958.	4224.	2738.	870.	292.	159.	22897.
Supply minus use	33.	331.	412.	80.	-1447.	-3486.	-4403.	-3102.	-1717.	211.	349.	607.	-12133.
Cumulative soil moisture													
(maximum capacity-3,101 a.f.)	579.	910.	1322.	1402.	0.	0.	0.	0.	0.	211.	560.	1166.	
Consumptive use deficit	0.	0.	0.	0.	-45.	-3486.	-4403.	-3102.	-1717.	0.	0.	0.	-12754.
Actual consumptive use	141.	164.	429.	707.	2530.	1151.	1555.	1123.	1021.	870.	292.	159.	10143.
Addition to ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Net water surface evaporation	5.	5.	16.	37.	59.	87.	87.	69.	50.	25.	23.	-1.	462.
Net evaporation from Little Salt Lake	46.	43.	156.	355.	569.	832.	838.	661.	483.	239.	221.	-11.	4432.
M and I consumptive use	17.	20.	26.	33.	33.	36.	49.	49.	36.	27.	23.	20.	369.
Supply to wetland and ground water	387.	387.	942.	2196.	2486.	-935.	-1715.	-1387.	-636.	316.	549.	467.	3060.
Precipitation on wetland	65.	272.	423.	233.	181.	0.	155.	48.	203.	635.	328.	445.	2988.
Wetland consumptive use	90.	103.	276.	427.	738.	1392.	2150.	2113.	1620.	726.	270.	114.	10021.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													24810.
Consumptive use by native vegetation in addition to precipitation	48.	48.	96.	192.	384.	675.	1012.	1012.	678.	384.	96.	96.	4726.
Outflow plus ground water storage change	314.	508.	993.	1810.	1545.	-3002.	-4722.	-4464.	-2731.	-159.	511.	702.	-8699.
Ground water outflow	525.	525.	525.	525.	525.	525.	525.	525.	525.	525.	525.	525.	6300.
Change in ground water storage	-211.	-13.	468.	1285.	1020.	-3527.	-5247.	-4989.	-3256.	-684.	-14.	177.	-14999.

TABLE 93.--Annual water budget, Parowan (2B1-1b, 3b, 3c), Beaver River Basin

CALENDAR YEAR 1961													
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Tributary inflow	550.	529.	928.	3224.	4725.	1414.	772.	2208.	1944.	596.	508.	529.	17927.
Diversions to cropland	385.	370.	650.	2257.	3307.	990.	540.	1546.	1361.	417.	356.	370.	12549.
20 percent to root-zone	77.	74.	130.	451.	661.	198.	108.	309.	272.	83.	71.	74.	2510.
Pumped irrigation water	0.	0.	0.	0.	665.	2280.	2850.	2280.	1425.	0.	0.	0.	9500.
34 percent to root-zone	0.	0.	0.	0.	226.	775.	969.	775.	484.	0.	0.	0.	3230.
Precipitation on cropland	394.	194.	2533.	942.	481.	100.	715.	1464.	348.	321.	408.	575.	8476.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	471.	268.	2663.	1394.	1369.	1073.	1792.	2548.	1104.	404.	479.	649.	14216.
Potential consumptive use													
on irrigated cropland	133.	189.	335.	647.	2522.	5043.	6181.	4362.	2045.	751.	176.	145.	22529.
Supply minus use	339.	79.	2329.	747.	-1153.	-3970.	-4389.	-1813.	-941.	-347.	303.	504.	-8313.
Cumulative soil moisture													
(maximum capacity-3,101 a.f.)	1505.	1584.	3101.	3101.	1948.	0.	0.	0.	0.	0.	303.	807.	
Consumptive use deficit	0.	0.	0.	0.	0.	-2022.	-4389.	-1813.	-941.	-347.	0.	0.	-9512.
Actual consumptive use	133.	189.	335.	647.	2522.	3022.	1792.	2548.	1104.	404.	176.	145.	13017.
Addition to ground water	0.	0.	811.	747.	0.	0.	0.	0.	0.	0.	0.	0.	1559.
Net water surface evaporation	1.	7.	-6.	26.	56.	74.	68.	27.	40.	27.	24.	0.	346.
Net evaporation from Little Salt Lake													
M and I consumptive use	12.	69.	-56.	245.	539.	707.	653.	262.	383.	261.	232.	2.	3309.
	17.	20.	26.	33.	33.	36.	49.	49.	36.	27.	23.	20.	369.
Supply to wetland and ground water													
Precipitation on wetland	443.	359.	1645.	3216.	3209.	-376.	-1075.	785.	728.	197.	158.	433.	9722.
Wetland consumptive use	255.	125.	1637.	609.	311.	65.	462.	946.	225.	207.	263.	371.	5476.
Precipitation and consumptive use on idle land, native vegetation and town and community areas	85.	119.	216.	390.	723.	1514.	2231.	2182.	1210.	627.	163.	104.	9563.
Consumptive use by native vegetation in addition to precipitation													45467.
Outflow plus ground water storage change	60.	60.	120.	240.	480.	840.	1260.	1260.	840.	480.	120.	120.	5880.
Ground water outflow	553.	305.	2946.	3195.	2317.	-2665.	-4104.	-1711.	-1097.	-703.	138.	580.	-245.
	525.	525.	525.	525.	525.	525.	525.	525.	525.	525.	525.	525.	6300.
Change in ground water storage	28.	-220.	2421.	2670.	1792.	-3190.	-4629.	-2236.	-1622.	-1228.	-387.	55.	-6545.

TABLE 94.--Annual water budget, Parowan (2B1-1b, 3b, 3c), Beaver River Basin

CALENDAR YEAR 1962

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Tributary inflow	596.	818.	1037.	8942.	9760.	3754.	1634.	818.	818.	640.	596.	487.	29901.
Diversions to cropland	417.	573.	726.	6259.	6832.	2628.	1144.	573.	573.	448.	417.	341.	20931.
20 percent to root-zone	83.	115.	145.	1252.	1366.	526.	229.	115.	115.	90.	83.	68.	4186.
Pumped irrigation water	0.	0.	0.	0.	707.	2424.	3030.	2424.	1515.	0.	0.	0.	10100.
34 percent to root-zone	0.	0.	0.	0.	240.	824.	1030.	824.	515.	0.	0.	0.	3434.
Precipitation on cropland	682.	1731.	1711.	795.	815.	374.	134.	47.	983.	421.	394.	608.	8696.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	765.	1846.	1856.	2047.	2422.	1724.	1393.	985.	1612.	511.	478.	676.	16317.
Potential consumptive use													
on irrigated cropland	141.	185.	221.	821.	2100.	3920.	5038.	377.	2509.	931.	359.	176.	16777.
Supply minus use	624.	1661.	1635.	1227.	323.	-2196.	-3645.	609.	-897.	-420.	119.	500.	-460.
Cumulative soil moisture													
(maximum capacity-3,101 a.f.)	1430.	3091.	3101.	3101.	3101.	905.	0.	609.	0.	0.	119.	619.	
Consumptive use deficit	0.	0.	0.	0.	0.	0.	-2740.	0.	-288.	-420.	0.	0.	-3448.
Actual consumptive use	141.	185.	221.	821.	2100.	3920.	2298.	377.	2221.	511.	359.	176.	13329.
Addition to ground water	0.	0.	1626.	1227.	323.	0.	0.	0.	0.	0.	0.	0.	3175.
Net water surface evaporation	-2.	-11.	4.	27.	48.	64.	82.	71.	49.	30.	24.	0.	385.
Net evaporation from Little													
Salt Lake	-20.	-105.	37.	258.	456.	613.	784.	682.	472.	284.	234.	-2.	3693.
M and I consumptive use	17.	20.	26.	33.	33.	36.	49.	49.	36.	27.	23.	20.	369.
Supply to wetland and													
ground water	518.	799.	2451.	8599.	7939.	1691.	-540.	-923.	-369.	210.	231.	401.	21009.
Precipitation on wetland	440.	1118.	1105.	514.	527.	242.	86.	30.	635.	272.	255.	393.	5618.
Wetland consumptive use	90.	116.	142.	496.	602.	1177.	1818.	188.	1485.	777.	331.	126.	7348.
Precipitation and consumptive													
use on idle land, native													
vegetation and town and													
community areas													46647.
Consumptive use by native													
vegetation in addition													
to precipitation	100.	100.	200.	400.	800.	1400.	2100.	2100.	1400.	800.	200.	200.	9800.
Outflow plus ground water													
storage change	768.	1701.	3214.	8217.	7064.	-644.	-4372.	-3181.	-2619.	-1095.	-45.	468.	9479.
Ground water outflow	525.	525.	525.	525.	525.	525.	525.	525.	525.	525.	525.	525.	6300.
Change in ground water storage	243.	1176.	2689.	7692.	6539.	-1169.	-4897.	-3706.	-3144.	-1620.	-570.	-57.	3179.

TABLE 25.--Annual water budget, Parowan (281-16, 36, 3c), Beaver River Basin

CALENDAR YEAR 1963

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Tributary inflow	551.	750.	818.	1810.	4857.	1059.	596.	1281.	1237.	575.	640.	487.	14661.
Diversions to cropland	388.	525.	573.	1267.	3400.	741.	417.	897.	866.	401.	448.	341.	10263.
20 percent to root-zone	77.	105.	115.	253.	680.	148.	83.	179.	173.	80.	90.	68.	2053.
Pumped irrigation water	0.	0.	0.	0.	812.	2784.	3480.	2784.	1740.	0.	0.	0.	11600.
34 percent to root-zone	0.	0.	0.	0.	276.	027.	1183.	947.	592.	0.	0.	0.	3944.
Precipitation on cropland	274.	1069.	781.	1110.	0.	374.	1671.	1745.	1036.	428.	1136.	180.	9806.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	351.	1174.	897.	1363.	956.	1469.	2938.	2871.	1801.	508.	1226.	249.	15803.
Potential consumptive use													
on irrigated cropland	140.	277.	289.	491.	2831.	3592.	5313.	3825.	2556.	1044.	263.	155.	20775.
Supply minus use	211.	898.	607.	871.	-1875.	-2121.	-2375.	-955.	-755.	-535.	963.	94.	-4973.
Cumulative soil moisture													
(maximum capacity-3,101 a.f.)	831.	1718.	2336.	3101.	1226.	0.	0.	0.	0.	0.	963.	1056.	
Consumptive use deficit	0.	0.	0.	0.	0.	-895.	-2375.	-955.	-755.	-535.	0.	0.	-5515.
Actual consumptive use	140.	277.	289.	492.	2831.	2695.	2938.	2871.	1801.	508.	263.	155.	15260.
Addition to ground water	0.	0.	0.	105.	0.	0.	0.	0.	0.	0.	0.	0.	105.
Net water surface evaporation	3.	-3.	15.	18.	70.	60.	70.	32.	32.	31.	16.	5.	347.
Net evaporation from Little Salt Lake	26.	-30.	142.	174.	667.	573.	671.	308.	305.	299.	150.	46.	3331.
M and I consumptive use	17.	20.	26.	33.	33.	36.	49.	49.	36.	27.	23.	20.	369.
Supply to wetland and ground water	428.	658.	521.	1437.	3131.	-705.	-1461.	-231.	99.	137.	362.	348.	4723.
Precipitation on wetland	177.	691.	505.	717.	0.	241.	1080.	1127.	669.	276.	734.	117.	6335.
Wetland consumptive use	89.	173.	186.	297.	811.	1078.	1917.	1914.	1513.	871.	243.	111.	9204.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													52602.
Consumptive use by native vegetation in addition to precipitation	50.	50.	100.	200.	400.	700.	1050.	1050.	700.	400.	100.	100.	4900.
Outflow plus ground water storage change	466.	1125.	740.	1657.	1920.	-2241.	-3348.	-2068.	-1445.	-858.	753.	254.	-3046.
Ground water outflow	525.	525.	525.	525.	525.	525.	525.	525.	525.	525.	525.	525.	6300.
Change in ground water storage	-59.	600.	215.	1132.	1395.	-2766.	-3873.	-2593.	-1970.	-1383.	228.	-271.	-9346.

TABLE 96 --Annual water budget, Parowan (2B1-1b, 3b, 3c), Beaver River Basin

	CALENDAR YEAR 1964												
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Tributary inflow	508.	552.	993.	2627.	9650.	3114.	1281.	1634.	552.	487.	574.	618.	22590.
Diversions to cropland	356.	386.	695.	1839.	6755.	2180.	897.	1144.	386.	341.	402.	433.	15813.
20 percent to root-zone	71.	77.	139.	368.	1351.	436.	179.	229.	77.	68.	80.	87.	3163.
Pumped irrigation water	0.	0.	0.	0.	812.	2784.	3480.	2784.	1740.	0.	0.	0.	11600.
34 percent to root-zone	0.	0.	0.	0.	276.	947.	1183.	947.	592.	0.	0.	0.	3944.
Precipitation on cropland	227.	241.	1163.	1150.	261.	307.	301.	969.	675.	33.	755.	909.	6992.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	298.	318.	1302.	1517.	1888.	1690.	1663.	2145.	1344.	102.	836.	996.	14098.
Potential consumptive use													
on irrigated cropland	147.	148.	218.	508.	2139.	3804.	5542.	3659.	2096.	1016.	187.	163.	19627.
Supply minus use	151.	170.	1084.	1010.	-251.	-2114.	-3878.	-1514.	-752.	-914.	648.	833.	-5529.
Cumulative soil moisture													
(maximum capacity-3,101 a.f.)	1207.	1377.	2461.	3101.	2850.	736.	0.	0.	0.	0.	648.	1481.	
Consumptive use deficit	0.	0.	0.	0.	0.	0.	-3142.	-1514.	-752.	-914.	0.	0.	-6323.
Actual consumptive use	147.	148.	218.	508.	2139.	3804.	2399.	2145.	1344.	102.	187.	163.	13304.
Addition to ground water	0.	0.	0.	369.	0.	0.	0.	0.	0.	0.	0.	0.	369.
Net water surface evaporation	3.	7.	10.	15.	50.	56.	79.	45.	39.	34.	20.	-4.	354.
Net evaporation from Little Salt Lake	31.	64.	99.	148.	478.	533.	755.	434.	371.	326.	193.	-36.	3396.
M and I consumptive use	17.	20.	26.	33.	33.	36.	49.	49.	36.	27.	23.	20.	369.
Supply to wetland and ground water													
Precipitation on wetland	386.	384.	719.	2432.	7462.	1107.	-964.	-70.	-563.	32.	258.	551.	11733.
Wetland consumptive use	147.	155.	751.	743.	168.	199.	194.	626.	436.	22.	488.	587.	4517.
Precipitation and consumptive use on idle land, native vegetation and town and community areas	94.	93.	141.	307.	613.	1142.	2000.	1830.	1241.	848.	173.	116.	8598.
Consumptive use by native vegetation in addition to precipitation													
													37504.
Outflow plus ground water storage change													
Ground water outflow	75.	75.	150.	300.	600.	1050.	1575.	1575.	1050.	600.	150.	150.	7350.
Change in ground water storage													
	364.	371.	1179.	2568.	6417.	-886.	-4345.	-2849.	-2418.	-1394.	423.	872.	302.
	525.	525.	525.	525.	525.	525.	525.	525.	525.	525.	525.	525.	6300.
	-161.	-154.	654.	2043.	5892.	-1411.	-4870.	-3374.	-2943.	-1919.	-102.	347.	-5998.

TABLE 97.--Annual water budget, Parowan (2B1-1b, 3b, 3c), Beaver River Basin

	CALENDAR YEAR 1965												
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Tributary inflow	730.	772.	882.	3445.	12254.	11923.	3180.	1566.	1436.	862.	906.	1015.	38971.
Diversions to cropland	511.	540.	617.	2411.	8578.	8346.	2226.	1096.	1005.	603.	634.	710.	27280.
20 percent to root-zone	102.	108.	123.	482.	1716.	1669.	445.	219.	201.	121.	127.	142.	5456.
Pumped irrigation water	0.	0.	0.	0.	756.	2592.	3240.	2592.	1620.	0.	0.	0.	10800.
34 percent to root-zone	0.	0.	0.	0.	257.	881.	1102.	881.	551.	0.	0.	0.	3672.
Precipitation on cropland	709.	1290.	1912.	1096.	1083.	441.	1370.	1103.	709.	107.	1136.	1150.	12105.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	811.	1398.	2035.	1579.	3055.	2992.	2917.	2203.	1460.	228.	1263.	1292.	21233.
Potential consumptive use													
on irrigated cropland	170.	166.	243.	546.	1879.	3424.	4687.	3495.	1673.	948.	333.	177.	17743.
Supply minus use	640.	1232.	1792.	1033.	1176.	-432.	-1770.	-1292.	-213.	-721.	930.	1114.	3490.
Cumulative soil moisture													
(maximum capacity-3,101 a.f.)	2121.	3101.	3101.	3101.	3101.	2669.	899.	0.	0.	0.	930.	2044.	
Consumptive use deficit	0.	0.	0.	0.	0.	0.	0.	-393.	-213.	-721.	0.	0.	-1327.
Actual consumptive use	170.	166.	243.	546.	1879.	3424.	4687.	3102.	1460.	228.	333.	177.	16416.
Addition to ground water	0.	252.	1792.	1033.	1176.	0.	0.	0.	0.	0.	0.	0.	4253.
Net water surface evaporation	-2.	-6.	1.	15.	38.	54.	53.	39.	36.	33.	16.	-7.	269.
Net evaporation from Little													
Salt Lake	-24.	-55.	14.	141.	363.	515.	505.	373.	349.	317.	150.	-64.	2584.
M and I consumptive use	17.	20.	26.	33.	33.	36.	49.	49.	36.	27.	23.	20.	369.
Supply to wetland and													
ground water	637.	957.	2509.	3807.	11024.	8768.	1026.	5.	263.	364.	591.	924.	30874.
Precipitation on wetland	458.	833.	1235.	708.	700.	285.	865.	713.	458.	69.	734.	743.	7820.
Wetland consumptive use	109.	104.	157.	330.	539.	1028.	1692.	1749.	990.	791.	308.	127.	7922.
Precipitation and consumptive													
use on idle land, native													
vegetation and town and													
community areas													
Consumptive use by native													64932.
vegetation in addition													
to precipitation	149.	129.	258.	516.	1032.	1806.	2709.	2709.	1806.	1032.	258.	258.	12642.
Outflow plus ground water													
storage change	857.	1557.	3329.	3669.	10153.	6219.	-2490.	-3740.	-2075.	-1390.	759.	1282.	18130.
Ground water outflow	525.	525.	525.	525.	525.	525.	525.	525.	525.	525.	525.	525.	6300.
Change in ground water storage	331.	1032.	2804.	3144.	9628.	5694.	-3015.	--265.	-2600.	-1915.	234.	757.	11830.

TABLE 98.--Representative potential consumptive use (calendar year 1961), Cedar (2B1-1c, 2, 4), Beaver River Basin

Land use	Acres	MONTHLY CONSUMPTIVE USE, Inches												Annual use	
		Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Inches	Acre-Feet
		Irrigated Cropland													
Alfalfa	7,069	.26	.33	.43	1.17	4.05	7.13	8.29	6.75	3.34	1.25	.29	.23	33.53	19,749
Small grain	2,038	.17	.21	.27	1.04	3.60	8.08	5.67	1.56	.84	.53	.18	.14	22.29	3,786
Corn	737	.17	.21	.27	.55	1.46	3.79	6.79	6.69	3.48	.53	.18	.14	24.25	1,490
Potato	5	.17	.21	.27	.55	1.01	2.97	6.87	8.25	4.62	.66	.18	.14	25.90	11
Hayland	149	.26	.33	.43	1.67	3.38	5.81	6.87	5.69	2.94	1.67	.30	.23	29.58	367
Pasture	1,036	.26	.33	.43	1.67	3.38	5.81	6.87	5.69	2.94	1.67	.30	.23	29.58	2,554
Suburban crops	1,415	.26	.33	.43	1.67	3.38	5.81	6.87	5.69	2.94	1.67	.30	.23	29.58	3,488
Total use	12,449	.24	.31	.40	1.21	3.68	6.81	7.47	5.67	2.86	1.18	.27	.21	30.31 ^a	31,446
Wetlands (Phreatophytes)															
Meadow W2	404	.37	.44	.57	1.26	2.29	4.29	5.67	5.12	2.80	1.72	.56	.39	25.48	858
Salt grass W1	848	.22	.27	.37	.84	1.54	2.97	3.73	3.19	1.69	1.02	.33	.22	16.36	1,156
Salt grass W2	2,146	.37	.44	.57	1.26	2.29	4.29	5.67	5.12	2.80	1.72	.56	.39	25.48	4,557
Sage and rabbitbrush W1	746	.17	.21	.27	.55	.94	2.02	3.28	3.25	1.96	1.02	.23	.14	14.03	872
Sage and rabbitbrush W2	400	.25	.32	.49	1.04	1.99	5.24	8.21	8.12	4.56	2.44	.58	.24	33.47	1,116
Cottonwoods	62	.43	.67	1.23	3.02	5.33	9.02	10.60	8.69	4.62	2.67	.74	.43	47.45	245
Greasewood	392	.17	.21	.27	.55	.94	2.02	3.28	3.25	1.96	1.02	.33	.22	14.20	464
Total use	4,998	.29	.35	.47	1.03	1.87	3.68	5.07	4.65	2.58	1.51	.45	.30	22.25 ^a	9,268
Consumptive Use of Precipitation															
Idle land	8,571													12.81	9,149
Native vegetation	41,060													12.81	43,832
Town and community areas	4,900													12.81	5,231
Water Surface Evaporation															
Net evaporation	173	.55	1.18	.28	2.91	5.40	9.08	8.04	2.91	3.26	2.77	3.05	.35	39.22	565
GRAND TOTAL	72,151													16.55 ^a	99,490

^aWeighted value.

TABLE 99.--Annual water budget, Cedar (2B1-1c, 2, 4), Beaver River Basin

CALENDAR YEAR 1956

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Inflow from Watershed F-5, Sevier River	547.	547.	547.	548.	548.	548.	548.	548.	548.	547.	547.	547.	6570.
Ground water inflow from other watersheds	258.	258.	258.	258.	259.	259.	259.	259.	258.	258.	258.	258.	3100.
Tributary inflow	319.	346.	1074.	3151.	7369.	2097.	973.	338.	63.	211.	32.	43.	16016.
Diversions to cropland	182.	188.	340.	777.	2697.	925.	598.	878.	313.	363.	204.	267.	7731.
25 percent to root-zone	45.	47.	85.	194.	674.	231.	149.	219.	78.	91.	51.	67.	1933.
Pumped irrigation water	0.	0.	0.	0.	1155.	3960.	4950.	3960.	2475.	0.	0.	0.	16500.
35 percent to root-zone	0.	0.	0.	0.	404.	1386.	1732.	1386.	866.	0.	0.	0.	5775.
Precipitation on cropland	904.	431.	92.	678.	1027.	544.	2023.	103.	113.	226.	82.	277.	6501.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	949.	478.	178.	872.	2105.	2162.	3905.	1708.	1058.	317.	133.	344.	14209.
Potential consumptive use on irrigated cropland	321.	212.	482.	1187.	4040.	6646.	7189.	5602.	4176.	1318.	262.	228.	31664.
Supply minus use	628.	266.	-305.	-314.	-1935.	-4484.	-3284.	-3894.	-3118.	-1002.	-129.	116.	-17455.
Cumulative soil moisture (maximum capacity-3,482 a.f.)	1091.	1357.	1052.	738.	0.	0.	0.	0.	0.	0.	0.	116.	
Consumptive use deficit	0.	0.	0.	0.	-1197.	-4484.	-3284.	-3894.	-3118.	-1002.	-129.	0.	-17108.
Actual consumptive use	321.	212.	482.	1187.	2843.	2162.	3905.	1708.	1058.	317.	133.	228.	14556.
Addition to ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Net water surface evaporation	0.	13.	37.	48.	80.	137.	89.	117.	105.	56.	48.	11.	741.
M and I consumptive use	87.	96.	116.	135.	135.	144.	183.	183.	144.	116.	106.	96.	1541.
Supply to wetland and ground water	991.	995.	1641.	3580.	6882.	1005.	-374.	-761.	-324.	753.	632.	675.	15697.
Precipitation on wetland	363.	173.	37.	272.	412.	219.	812.	41.	45.	91.	33.	111.	2610.
Wetland consumptive use	154.	98.	230.	403.	822.	1443.	1956.	1844.	1516.	678.	178.	130.	9454.
Precipitation and consumptive use on idle land, native vegetation and town and community areas.													28476.
Consumptive use by native vegetation in addition to precipitation	130.	130.	260.	520.	1040.	1820.	2730.	2730.	1820.	1080.	260.	260.	12780.
Outflow plus ground water storage change	1070.	940.	1188.	2929.	5432.	-2040.	-4248.	-5293.	-3615.	-914.	227.	396.	-3927.
Ground water outflow	405.	406.	406.	406.	406.	406.	406.	406.	406.	406.	406.	405.	4870.
Change in ground water storage	665.	534.	782.	2532.	5026.	-2446.	-4654.	-5699.	-4021.	-1320.	-179.	-9.	-8797.

TABLE 10Q --Annual water budget, Cedar (2B1-lc, 2, 4), Beaver River Basin

	CALENDAR YEAR 1957											
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
	Acre-Feet											
Inflow from Watershed F-5, Sevier River	547.	547.	547.	548.	548.	548.	548.	548.	548.	547.	547.	547.
Ground water inflow from other watersheds	258.	258.	258.	258.	259.	259.	259.	259.	258.	258.	258.	258.
Tributary inflow	225.	605.	612.	6883.	9803.	11556.	1451.	612.	119.	455.	755.	360.
Diversions to cropland	774.	111.	1161.	7270.	9313.	5134.	1338.	816.	525.	595.	583.	454.
25 percent to root-zone	194.	283.	240.	1817.	2328.	1284.	334.	204.	131.	149.	146.	114.
Pumped irrigation water	0.	0.	0.	0.	973.	3336.	4170.	3336.	2085.	0.	0.	0
35 percent to root-zone	0.	0.	0.	0.	341.	1168.	1458.	1168.	730.	0.	0.	0
Precipitation on cropland	356.	113.	945.	1828.	1469.	904.	811.	1982.	103.	1777.	1725.	308.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	1549.	396.	1235.	3646.	4138.	3355.	2605.	3354.	964.	1926.	1871.	422.
Potential consumptive use on irrigated cropland	214.	347.	503.	1089.	3079.	6262.	7282.	5886.	3565.	1197.	257.	267.
Supply minus use	1335.	48.	732.	2557.	1059.	-2907.	-4677.	-2534.	-2601.	729.	1614.	155.
Cumulative soil moisture (maximum capacity-3,482 a.f.)	1451.	1500.	2222.	3482.	3482.	575.	0.	0.	0.	729.	2343.	2498.
Consumptive use deficit	0.	0.	0.	0.	0.	0.	-4102.	-2534.	-2601.	0.	0.	0.
Actual consumptive use	214.	347.	503.	1089.	3079.	6262.	3180.	3354.	964.	1197.	257.	267.
Addition to ground water	0.	0.	0.	1307.	1059.	0.	0.	0.	0.	0.	0.	0.
Net water surface evaporation	-6.	17.	25.	26.	41.	90.	91.	81.	74.	21.	25.	10.
M and I consumptive use	87.	96.	116.	135.	135.	144.	183.	183.	144.	116.	106.	96.
Supply to wetland and ground water	756.	1014.	986.	7017.	8824.	9678.	190.	-216.	-154.	974.	1283.	945.
Precipitation on wetland	544.	45.	379.	734.	590.	363.	326.	796.	41.	713.	693.	124.
Wetland consumptive use	102.	161.	240.	370.	627.	1360.	1981.	1938.	1294.	615.	175.	153.
Precipitation and consumptive use on idle land, native vegetation and town and community areas												58348.
Consumptive use by native vegetation in addition to precipitation	220.	220.	440.	880.	1760.	3080.	4620.	4620.	3080.	1760.	440.	440.
Outflow plus ground water storage change	978.	679.	685.	6501.	7027.	5601.	-6086.	-5978.	-4487.	-687.	-1361.	476.
Ground water outflow	405.	406.	406.	406.	406.	406.	406.	406.	406.	406.	406.	405.
Change in ground water storage	573.	273.	279.	6096.	6621.	5195.	-6492.	-6384.	-4893.	-1093.	955.	71.
												1200.

TABLE 102.--Annual water budget, Cedar (2B1-1c, 2, 4), Beaver River Basin

	CALENDAR YEAR 1959												Annual
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	
	Acre-Feet												
Inflow from Watershed F-5, Sevier River	547.	547.	547.	548.	548.	548.	548.	548.	548	547.	547.	547.	6570.
Ground water inflow from other watersheds	258.	258.	258.	258.	259.	259.	259.	259.	258.	258.	258.	258.	3100.
Tributary inflow	235.	183.	746.	2486.	2097.	714.	212.	2370.	98.	127.	84.	36.	9390.
Diversions to cropland	164.	153.	287.	1822.	1452.	633.	407.	836.	179.	178.	178.	136.	6425.
25 percent to root-zone	41.	38.	72.	456.	363.	158.	102.	209.	45.	44.	44.	34.	1606.
Pumped irrigation water	0.	0.	0.	0.	1302.	4464.	5580.	4464.	2790.	0.	0.	0.	18600.
35 percent to root-zone	0.	0.	0.	0.	456.	1562.	1953.	1562.	976.	0.	0.	0.	6510.
Precipitation on cropland	246.	1294.	123.	72.	175.	51.	657.	1191.	113.	113.	544.	760.	5341.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	288.	1332.	195.	527.	993.	1772.	2712.	2963.	1134.	157.	589.	794.	13457.
Potential consumptive use on irrigated cropland	259.	242.	489.	1438.	3624.	7017.	7946.	6004.	3336.	1351.	381.	243.	32331.
Supply minus use	28.	1050.	-294.	-910.	-2631.	-5245.	-5234.	-3041.	-2202.	-1194.	288.	551.	-18874.
Cumulative soil moisture (maximum capacity-3,482 a.f.)	147.	1237.	943.	32.	0.	0.	0.	0.	0.	0.	208.	759.	
Consumptive use deficit	0.	0.	0.	0.	-2598.	-5245.	-5234.	-3041.	-2202.	-1194.	0.	0.	-19515.
Actual consumptive use	259.	242.	489.	1438.	1026.	1772.	2712.	2963.	1134.	157.	381.	243.	12816.
Addition to ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Net water surface evaporation	9.	1.	36.	66.	85.	141.	134.	103.	84.	61.	41.	4.	766.
M and I consumptive use	87.	96.	116.	135.	135.	144.	183.	183.	144.	116.	106.	96.	1541.
Supply to wetland and ground water	903.	853.	1327.	2636.	1866.	-485.	-1353.	1122.	-346.	711.	697.	707.	8637.
Precipitation on wetland	99.	520.	49.	29.	70.	21.	264.	478.	45.	45.	219.	305.	2144.
Wetland consumptive use	124.	112.	233.	489.	738.	1524.	2162.	1976.	1211.	695.	260.	139.	9662.
Precipitation and consumptive use on idle land, native vegetation and town and community areas.													23388.
Consumptive use by native vegetation in addition to precipitation	90.	90.	180.	360.	720.	1260.	1890.	1890.	1260.	720.	180.	180.	8820.
Outflow plus ground water storage change	787.	1170.	963.	1816.	478.	-3248.	-5141.	-2266.	-2772.	-659.	476.	694.	-7701.
Ground water outflow	405.	406.	406.	406.	406.	406.	406.	406.	406.	406.	406.	405.	4870.
Change in ground water storage	382.	764.	557.	1410.	72.	-3654.	-5547.	-2672.	-3178.	-1065.	70.	289.	-12571.

TABLE 103.--Annual water budget, Cedar (2B1-1c, 2, 4), Beaver River Basin

CALENDAR YEAR 1960													
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Inflow from Watershed F-5, Sevier River	547.	547.	547.	548.	548.	548.	548.	548.	548.	547.	547.	547.	6570.
Ground water inflow from other watersheds	258.	258.	258.	258.	259.	259.	259.	259.	258.	258.	258.	258.	3100.
Tributary inflow	162.	143.	1205.	3492.	4757.	1010.	223.	44.	292.	378.	707.	169.	12582.
Diversions to cropland	157.	152.	554.	1790.	2422.	660.	238.	179.	271.	259.	494.	246.	7424.
25 percent to root-zone	39.	38.	138.	448.	606.	165.	59.	45.	68.	65.	124.	62.	1856.
Pumped irrigation water	0.	0.	0.	0.	1274.	4368.	5460.	4368.	2730.	0.	0.	0.	18200.
35 percent to root-zone	0.	0.	0.	0.	446.	1529.	1911.	1529.	955.	0.	0.	0.	6370.
Precipitation on cropland	154.	401.	872.	842.	164.	112.	555.	62.	1202.	1602.	1787.	955.	8709.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	193.	429.	1011.	1290.	1216.	1807.	2525.	1635.	2225.	1667.	1911.	1017.	16935.
Potential consumptive use on irrigated cropland	201.	240.	619.	1344.	3972.	7064.	8043.	6121.	4161.	1299.	426.	218.	33710.
Supply minus use	-8.	198.	392.	-55.	-2756.	-5258.	-5586.	-1936.	-1936.	368.	1484.	798.	-16775.
Cumulative soil moisture (maximum capacity-3,482 a.f.)	751.	950.	1342.	1287.	0.	0.	0.	0.	0.	368.	1853.	2651.	-18667.
Consumptive use deficit	0.	0.	0.	0.	-1469.	-5258.	-5518.	-4486.	-1936.	0.	0.	0.	15043.
Actual consumptive use	201.	240.	619.	1344.	2503.	1807.	2525.	1625.	2225.	1299.	426.	218.	0.
Addition to ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	10.	0.	0.
Net water surface evaporation	11.	13.	26.	52.	91.	150.	141.	125.	72.	41.	24.	1.	748.
M and I consumptive use	87.	96.	116.	135.	135.	144.	183.	183.	144.	116.	106.	96.	1541.
Supply to wetland and ground water	830.	801.	1729.	3663.	4286.	-171.	-1264.	-1030.	-142.	961.	1258.	815.	11737.
Precipitation on wetland	62.	161.	350.	338.	66.	45.	223.	25.	482.	643.	717.	383.	3497.
Wetland consumptive use	96.	111.	295.	457.	809.	1534.	2188.	2015.	1511.	668.	290.	125.	10099.
Precipitation and consumptive use on idle land, native vegetation and town and community areas.													38150.
Consumptive use by native vegetation in addition to precipitation	110.	110.	220.	440.	880.	1540.	2310.	2310.	1540.	880.	220.	220.	10780.
Outflow plus ground water storage change	686.	740.	1565.	3104.	2664.	-2200.	-5540.	-2710.	56.	406.	1465.	254.	-5645.
Ground water outflow	405.	406.	406.	406.	406.	406.	406.	406.	406.	406.	406.	405.	4870.
Change in ground water storage	281.	33.	1159.	2698.	2258.	-3606.	-5946.	-5736.	-2116.	-350.	1059.	449.	-10515.

TABLE 104.--Annual water budget, Cedar (2B1-1c, 2, 4), Beaver River Basin

	CALENDAR YEAR 1961												
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Inflow from Watershed F-5, Sevier River	547.	547.	547.	548.	548.	548.	548.	548.	548.	547.	547.	547.	6570.
Ground water inflow from other watersheds	258.	258.	258.	258.	259.	259.	259.	259.	258.	258.	258.	258.	3100.
Tributary inflow	173.	173.	681.	3719.	5715.	1334.	473.	2388.	2031.	255.	133.	169.	17244.
Diversions to cropland	151.	151.	258.	954.	2234.	785.	490.	910.	732.	373.	215.	289.	7540.
25 percent to root-zone	38.	38.	6.	239.	559.	196.	123.	228.	183.	93.	53.	72.	1886.
Pumped irrigation water	0.	0.	0.	0.	937.	3226.	4170.	3336.	2085.	0.	0.	0.	13900.
35 percent to root-zone	0.	0.	0.	0.	341.	1168.	1455.	1168.	730.	0.	0.	0.	4865.
Precipitation on cropland	370.	154.	2009.	1043.	1027.	0.	1140.	2783.	1797.	873.	390.	698.	13290.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	408.	192.	3074.	1286.	1926.	1364.	2722.	4179.	2710.	966.	443.	771.	20041.
Potential consumptive use on irrigated cropland	251.	317.	410.	1261.	3821.	7064.	7754.	5888.	2963.	1222.	278.	217.	31446.
Supply minus use	156.	-125.	2664.	25.	-1895.	-5700.	-5031.	-1709.	-253.	-255.	166.	553.	-11404.
Cumulative soil moisture (maximum capacity-3,482 a.f.)	2807.	2682.	3482.	3482.	1587.	0.	0.	0.	0.	0.	166.	719.	
Consumptive use deficit	0.	0.	0.	0.	0.	-4113.	-5031.	-1709.	-253.	-255.	0.	0.	-11361.
Actual consumptive use	251.	317.	410.	1261.	3821.	2951.	2722.	4179.	2710.	967.	278.	217.	20084.
Addition to ground water	0.	0.	1864.	25.	0.	0.	0.	0.	0.	0.	0.	0.	1889.
Net water surface evaporation	8.	17.	-4.	42.	78.	131.	116.	42.	47.	40.	44.	5.	565.
M and I consumptive use	87.	96.	116.	135.	135.	144.	183.	183.	144.	116.	106.	96.	1541.
Supply to wetland and ground water	846.	828.	3173.	4134.	5410.	502.	-601.	1574.	1733.	810.	735.	801.	19945.
Precipitation on wetland	148.	62.	1208.	421.	412.	0.	458.	1117.	722.	350.	157.	280.	5336.
Wetland consumptive use	120.	147.	196.	428.	778.	1534.	2110.	1938.	1076.	628.	189.	124.	9268.
Precipitation and consumptive use on idle land, native vegetation and town and community areas.													58217.
Consumptive use by native vegetation in addition to precipitation	130.	130.	260.	520.	1040.	1820.	2730.	2730.	1820.	1040.	260.	260.	12740.
Outflow plus ground water storage change	744.	613.	3926.	3607.	4004.	-2852.	-4983.	-1977.	-441.	-507.	443.	697.	3274.
Ground water outflow	405.	406.	406.	406.	406.	406.	406.	406.	406.	406.	406.	405.	4870.
Change in ground water storage	339.	207.	3520.	3201.	3598.	-3258.	-5289.	-2383.	-847.	-913.	37.	292.	-1596.

TABLE 105.--Annual water budget, Cedar (2B1-lc, 2, 4), Beaver River Basin

CALENDAR YEAR 1962													
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Inflow from Watershed F-5, Sevier River	547.	547.	547.	548.	548.	548.	548.	548.	548.	547.	547.	547.	6570.
Ground water inflow from other watersheds	258.	258.	258.	258.	259.	259.	259.	259.	258.	258.	258.	258.	3100.
Tributary inflow	309.	703.	832.	11034.	12367.	4433.	1626.	547.	548.	311.	243.	97.	33053.
Diversions to cropland	833.	1235.	1134.	8967.	9573.	3104.	1232.	739.	541.	541.	460.	448.	28807.
25 percent to root-zone	208.	309.	263.	2242.	2393.	776.	308.	185.	135.	135.	115.	112.	7202.
Pumped irrigation water	0.	0.	0.	0.	1162.	3984.	4980.	3984.	2490.	0.	0.	0.	16600.
35 percent to root-zone	0.	0.	0.	0.	407.	1394.	1743.	1394.	871.	0.	0.	0.	5810.
Precipitation on cropland	503.	2044.	996.	431.	1428.	514.	411.	41.	1109.	873.	390.	698.	9439.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	711.	2353.	1280.	2673.	4228.	2684.	2462.	1620.	2116.	1008.	505.	810.	22450.
Potential consumptive use on irrigated cropland	190.	266.	329.	1549.	3369.	5890.	6825.	6121.	3972.	1460.	502.	1164.	31636.
Supply minus use	521.	2087.	951.	1124.	858.	-3206.	-4363.	-4501.	-1856.	-451.	3.	-354.	-9185.
Cumulative soil moisture (maximum capacity-3,482 a.f.)	1240.	3327.	3482.	3482.	3482.	276.	0.	0.	0.	0.	3.	0.	
Consumptive use deficit	0.	0.	0.	0.	0.	0.	-4087.	-4501.	-1856.	-451.	0.	-350.	-11245.
Actual consumptive use	190.	266.	329.	1549.	3369.	5890.	2738.	1620.	2116.	1008.	502.	814.	20391.
Addition to ground water	0.	0.	796.	1124.	858.	0.	0.	0.	0.	0.	0.	0.	2778.
Net water surface evaporation	6.	-10.	27.	50.	66.	112.	127.	128.	84.	48.	44.	5.	684.
M and I consumptive use	87.	96.	116.	135.	135.	144.	183.	183.	144.	116.	106.	96.	1541.
Supply to wetland and ground water	813.	1113.	2006.	10537.	11032.	2814.	72.	-537.	119.	816.	783.	689.	30265.
Precipitation on wetland	202.	821.	400.	173.	573.	206.	165.	16.	445.	350.	157.	280.	3789.
Wetland consumptive use	91.	123.	157.	526.	686.	1279.	1857.	2015.	1442.	750.	342.	665.	9933.
Precipitation and consumptive use on idle land, native vegetation and town and community areas.													41340.
Consumptive use by native vegetation in addition to precipitation													
Outflow plus ground water storage change													
Ground water outflow	220.	220.	440.	880.	1760.	3080.	4620.	4620.	3080.	1760.	440.	440.	21560.
Change in ground water storage	704.	1590.	1809.	9307.	9159.	-1339.	-6239.	-7155.	-3958.	-1343.	158.	-135.	2561.
	405.	406.	406.	406.	406.	406.	406.	406.	406.	406.	406.	405.	4870.
	299.	1184.	1403.	8898.	8753.	-1745.	-6645.	-7561.	-4364.	-1749.	-248.	-540.	-2309.

TABLE 106. --Annual water budget, Cedar (2Bl-1c, 2, 4), Beaver River Basin

CALENDAR YEAR 1963

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Inflow from Watershed P-5, Sevier River	547.	547.	547.	548.	548.	548.	548.	548.	548.	547.	547.	547.	6570.
Ground water inflow from other watersheds	258.	258.	258.	258.	259.	259.	259.	259.	258.	258.	258.	258.	3100.
Tributary inflow	170.	446.	540.	1853.	5877.	855.	229.	1159.	1075.	220.	309.	87.	12818.
Diversions to cropland	530.	637.	881.	1735.	4748.	1086.	593.	1255.	744.	508.	522.	510.	13758.
25 percent to root-zone	132.	159.	220.	434.	1187.	271.	148.	314.	186.	127.	132.	128.	3440.
Pumped irrigation water	0.	0.	0.	0.	1386.	4752.	5940.	4752.	2970.	0.	0.	0.	19800.
35 percent to root-zone	0.	0.	0.	0.	485.	1663.	2079.	1663.	1039.	0.	0.	0.	6930.
Precipitation on cropland	267.	904.	524.	1284.	10.	668.	51.	4427.	1654.	606.	1397.	51.	11842.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	299.	1063.	744.	1718.	1682.	2602.	2279.	6404.	2879.	733.	1530.	179.	22211.
Potential consumptive use on irrigated cropland	194.	366.	426.	1001.	4442.	5486.	7658.	5907.	4000.	1681.	403.	244.	31809.
Supply minus use	205.	697.	318.	717.	-2759.	-2884.	-5379.	497.	-1121.	-948.	1126.	-65.	-9597.
Cumulative soil moisture (maximum capacity-3,482 a.f.)	205.	902.	1220.	1937.	0.	0.	0.	497.	0.	0.	1126.	1061.	
Consumptive use deficit	0.	0.	0.	0.	-822.	-2884.	-5379.	0.	-625.	-948.	0.	0.	-10658.
Actual consumptive use	194.	366.	426.	1001.	3620.	2602.	2279.	5907.	3376.	733.	403.	244.	21150.
Addition to ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Net water surface evaporation	9.	6.	31.	31.	104.	103.	150.	33.	49.	55.	30.	14.	614.
M and I consumptive use	87.	96.	116.	135.	135.	144.	183.	183.	144.	116.	106.	96.	1541.
Supply to wetland and ground water	747.	990.	978.	2060.	4773.	-519.	-1524.	-228.	462.	727.	845.	655.	9964.
Precipitation on wetland	107.	363.	210.	515.	4.	268.	21.	1777.	664.	243.	561.	21.	4754.
Wetland consumptive use	93.	169.	203.	340.	904.	1191.	2084.	1944.	1453.	864.	275.	140.	9660.
Precipitation and consumptive use on idle land, native vegetation and town and community areas.													51864.
Consumptive use by native vegetation in addition to precipitation	110.	110.	220.	440.	880.	1540.	2310.	2310.	1540.	880.	220.	220.	10780.
Outflow plus ground water storage change	651.	1073.	765.	1795.	2993.	-2983.	-5697.	-2705.	-1867.	-774.	911.	316.	-5722.
Ground water outflow	405.	406.	406.	406.	406.	406.	406.	406.	406.	406.	406.	405.	4870.
Change in ground water storage	246.	667.	259.	1389.	2587.	-3389.	-6303.	-3111.	-2273.	-1180.	505.	-89.	-10592.

TABLE 107. --Annual water budget, Cedar (2Bl-lc, 2, 4), Beaver River Basin

CALENDAR YEAR 1964

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Inflow from Watershed F-5, Sevier River	547.	547.	547.	548.	548.	548.	548.	548.	548.	547.	547.	547.	6570.
Ground water inflow from other watersheds	258.	258.	258.	258.	259.	259.	259.	259.	258.	258.	258.	258.	3100.
Tributary inflow	128.	175.	782.	2940.	12237.	3573.	1140.	1609.	182.	99.	199.	262.	23326.
Diversions to cropland	468.	494.	985.	2648.	9406.	2775.	952.	919.	436.	419.	541.	575.	20618.
25 percent to root-zone	117.	123.	246.	662.	2351.	694.	238.	230.	109.	105.	135.	144.	5155.
Pumped irrigation water	0.	0.	0.	0.	1323.	4536.	5670.	4536.	2835.	0.	0.	0.	18900.
35 percent to root-zone	0.	0.	0.	0.	463.	1588.	1984.	1588.	992.	0.	0.	0.	6615.
Precipitation on cropland	41.	144.	965.	1736.	668.	637.	267.	1695.	421.	10.	657.	852.	8093.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	158.	267.	1212.	2398.	3482.	2918.	2490.	3512.	1522.	115.	792.	996.	19863.
Potential consumptive use on irrigated cropland	211.	214.	317.	1019.	3448.	5676.	7898.	5811.	3416.	1659.	269.	252.	30190.
Supply minus use	-53.	53.	894.	1378.	34.	-2757.	-5408.	-2299.	-1894.	-1544.	523.	744.	-10327.
Cumulative soil moisture (maximum capacity-3,482 a.f.)	1008.	1061.	1955.	3334.	3368.	611.	0.	0.	0.	0.	523.	1268.	
Consumptive use deficit	0.	0.	0.	0.	0.	0.	-4798.	-2299.	-1894.	-1544.	0.	0.	-10534.
Actual consumptive use	211.	214.	317.	1019.	3448.	5676.	3100.	3512.	1522.	115.	269.	252.	19656.
Addition to ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Net water surface evaporation	12.	17.	25.	21.	70.	95.	137.	79.	71.	60.	40.	3.	627.
M and I consumptive use	87.	96.	116.	135.	135.	144.	183.	183.	144.	116.	106.	96.	1541.
Supply to wetland and ground water	717.	744.	1200.	2928.	10025.	1860.	-595.	337.	-328.	624.	723.	825.	19058.
Precipitation on wetland	16.	58.	388.	697.	268.	256.	107.	680.	169.	4.	264.	342.	3249.
Wetland consumptive use	101.	99.	151.	346.	702.	1233.	2149.	1913.	1240.	853.	183.	144.	9114.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													35445.
Consumptive use by native vegetation in addition to precipitation	170.	170.	340.	680.	1360.	2380.	3570.	3570.	2380.	1360.	340.	340.	16660.
Outflow plus ground water storage change													
Ground water outflow	462.	533.	1096.	2598.	8231.	-1497.	-6207.	-4465.	-3779.	-1585.	464.	683.	-3467.
	405.	406.	406.	406.	406.	406.	406.	406.	406.	506.	406.	405.	4870.
Change in ground water storage	57.	127.	690.	2192.	7825.	-1903.	-6613.	-4871.	-4185.	-1991.	58.	278.	-8337.

TABLE 108. --Annual water budget, Cedar (2Bl-lc, 2, 4), Beaver River Basin

CALENDAR YEAR 1965

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Inflow from Watershed F-5, Sevier River	547.	547.	547.	548.	548.	548.	548.	548.	548.	547.	547.	547.	6570.
Ground water inflow from other watersheds	258.	258.	258.	258.	259.	259.	259.	259.	258.	258.	258.	258.	3100.
Tributary inflow	418.	465.	612.	4011.	15677.	15239.	3654.	1529.	1350.	602.	640.	794.	44991.
Diversions to cropland	698.	720.	1081.	3247.	13304.	14001.	3046.	1329.	1112.	903.	897.	886.	41284.
25 percent to root-zone	174.	195.	270.	312.	3325.	3500.	762.	332.	278.	226.	224.	221.	10321.
Pumped irrigation water	0.	0.	0.	0.	1022.	3504.	4380.	3504.	2190.	0.	0.	0.	14600.
35 percent to root-zone	0.	0.	0.	0.	358.	1226.	1533.	1226.	766.	0.	0.	0.	5110.
Precipitation on cropland	534.	2248.	1787.	1838.	1520.	195.	565.	1397.	1715.	534.	1256.	1797.	15488.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	708.	2444.	2057.	2650.	5204.	4922.	2859.	2955.	2760.	760.	1580.	2019.	30919.
Potential consumptive use on irrigated cropland	259.	234.	394.	1207.	3184.	5137.	6848.	5602.	2840.	1544.	486.	245.	27980.
Supply minus use	449.	2210.	1662.	1444.	2019.	-215.	-3988.	-2646.	-80.	-784.	1094.	1774.	2939.
Cumulative soil moisture (maximum capacity-3,482 a.f.)	1717.	3482.	3482.	3482.	3482.	3267.	0.	0.	0.	0.	1094.	2868.	
Consumptive use deficit	0.	0.	0.	0.	0.	0.	-721.	-2646.	-80.	-784.	0.	0.	-4232.
Actual consumptive use	259.	234.	394.	1207.	3184.	5137.	6126.	2955.	2760.	760.	486.	245.	23748.
Addition to ground water	0.	445.	1663.	1444.	2019.	0.	0.	0.	0.	0.	0.	0.	5571.
Net water surface evaporation	5.	-13.	13.	17.	54.	100.	101.	74.	33.	53.	30.	-11.	458.
M and I consumptive use	87.	96.	116.	135.	135.	144.	183.	183.	144.	116.	106.	96.	1541.
Supply to wetland and ground water	956.	1437.	2630.	5296.	14630.	11075.	1882.	520.	935.	1013.	1085.	1292.	42802.
Precipitation on wetland	212.	903.	717.	738.	610.	78.	227.	561.	689.	214.	544.	722.	6218.
Wetland consumptive use	124.	108.	188.	410.	648.	1116.	1863.	1844.	1031.	793.	331.	140.	8597.
Precipitation and consumptive use on idle land, native vegetation and town and community areas.													67836.
Consumptive use by native vegetation in addition to precipitation	240.	240.	420.	960.	1920.	3360.	5040.	5040.	3360.	1920.	480.	480.	23520.
Outflow plus ground water storage change	807.	1991.	2730.	4664.	12672.	6678.	-4794.	-5803.	-2763.	-1486.	818.	1394.	16903.
Ground water outflow	405.	406.	406.	406.	406.	406.	406.	406.	406.	406.	406.	405.	4870.
Change in ground water storage	402.	1585.	2024.	4250.	12266.	6272.	-5200.	-6209.	-3174.	-1892.	412.	989.	12033.

TABLE 10. Representative potential consumptive use (calendar year 1959), Newcastle (2B2-1), Beaver River Basin

Land use	Acres	MONTHLY CONSUMPTIVE USE, Inches												Annual Use	
		Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Inches	Acre-Feet
		Irrigated Cropland													
Alfalfa	1,791	.23	.27	.41	.80	3.60	5.51	6.84	5.92	3.41	1.21	.30	.24	28.73	4,288
Small grain	772	.14	.17	.25	.92	2.84	6.04	4.31	1.40	.86	.54	.18	.15	17.81	1,146
Corn	818	.14	.17	.25	.50	1.13	2.78	5.30	5.92	3.17	.54	.18	.15	20.24	1,380
Sugar beets	128	.14	.17	.25	.50	1.50	3.46	6.28	6.82	4.27	1.06	.18	.15	24.79	264
Potatoes	350	.14	.17	.25	.50	.83	1.95	5.24	7.26	4.34	.54	.18	.15	21.56	629
Hayland	296	.23	.27	.41	1.38	3.00	4.48	5.67	5.08	3.00	1.71	.30	.24	25.76	635
Pasture	138	.23	.27	.41	1.38	3.00	4.48	5.67	5.08	3.00	1.71	.30	.24	25.76	296
Suburban crop	200	.23	.27	.41	1.38	3.00	4.48	5.67	5.08	3.00	1.71	.30	.24	25.76	429
Total use	4,493	.19	.22	.34	.82	2.66	4.62	5.82	5.15	2.97	.99	.24	.20	24.22 ^a	9,068
Wetlands (Phreatophytes)															
Salt grass W2	67	.32	.35	.54	1.14	2.04	3.31	4.68	4.58	2.86	1.75	.57	.41	22.55	126
Sage and Rabbitbrush W1	356	.14	.17	.25	.50	.83	1.56	2.71	2.90	2.00	1.04	.24	.15	12.50	371
Willows and Cotton-woods W2	4	.37	.54	1.15	2.74	4.74	6.97	8.75	7.76	4.72	2.73	.75	.46	41.68	14
Greasewood W1	491	.14	.17	.25	.50	.83	1.56	2.71	2.90	2.00	1.04	.24	.15	12.50	511
Total use	918	.16	.18	.27	.56	.94	1.71	2.87	3.04	2.08	1.10	.26	.17	13.36 ^a	1,022
Consumptive Use of Precipitation															
Idle land	2,670													9.53	2,120
Native vegetation	22,897													9.53	18,182
Town and community area	918													9.53	729
Water Surface Evaporation															
Net evaporation	38	.63	-1.26	2.52	6.00	7.58	11.36	10.73	7.89	6.31	5.05	3.78	-1.26	59.36	191
GRAND TOTAL	31,934													11.76 ^a	31,312

^aWeighted value.

TABLE 110. --Annual water budget, Newcastle (2B2-1), Beaver River Basin

	CALENDAR YEAR 1958												Annual
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	
	Acre-Feet												
Tributary inflow	34.	40.	49.	444.	405.	322.	281.	220.	201.	312.	40.	34.	2382.
Releases from New Castle Reservoir	0.	0.	0.	93.	1019.	973.	1344.	1019.	185.	0.	0.	0.	4633.
Diversions to cropland	0.	0.	49.	537.	1424.	1295.	1625.	1239.	386.	312.	0.	0.	6867.
32 percent to root-zone	0.	0.	16.	172.	456.	414.	520.	396.	124.	100.	0.	0.	2198.
Pumped irrigation water	0.	0.	0.	0.	647.	1095.	1343.	1194.	697.	0.	0.	0.	4976.
32 percent to root-zone	0.	0.	0.	0.	207.	350.	430.	382.	223.	0.	0.	0.	1592.
Precipitation on cropland	72.	525.	1100.	561.	676.	0.	0.	137.	223.	277.	492.	0.	4062.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	72.	525.	1116.	732.	1338.	765.	950.	915.	570.	377.	492.	0.	7852.
Potential consumptive use on irrigated cropland	70.	83.	126.	306.	997.	1730.	2178.	1930.	1112.	370.	91.	75.	9068.
Supply minus use	2.	442.	990.	427.	342.	-966.	-1228.	-1015.	-542.	7.	401.	-75.	-1216.
Cumulative soil moisture (maximum capacity-1,274 a.f.)	1274.	1274.	1274.	1274.	1274.	308.	0.	0.	0.	7.	408.	332.	
Consumptive use deficit	0.	0.	0.	0.	0.	0.	-920.	-1015.	-542.	0.	0.	0.	-2477.
Actual consumptive use	70.	83.	126.	306.	997.	1730.	1258.	915.	570.	370.	91.	75.	6591.
Addition to ground water	2.	442.	990.	427.	342.	0.	0.	0.	0.	0.	0.	0.	2202.
Net water surface evaporation	2.	0.	0.	11.	17.	35.	39.	23.	22.	16.	10.	3.	178.
M and I consumptive use	2.	2.	3.	4.	4.	5.	6.	6.	4.	3.	3.	2.	44.
Supply to wetland and ground water	31.	480.	1021.	777.	1082.	490.	630.	431.	14.	193.	27.	29.	5206.
Precipitation on wetland	15.	107.	225.	115.	138.	0.	0.	28.	46.	57.	101.	0.	830.
Wetland consumptive use	12.	14.	21.	43.	72.	131.	220.	233.	159.	84.	20.	13.	1022.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													23947.
Consumptive use by native vegetation in addition to precipitation	36.	36.	72.	144.	288.	504.	756.	756.	504.	288.	72.	72.	3528.
Outflow plus ground water storage change	-2.	537.	1152.	705.	861.	-145.	-346.	-530.	-604.	-122.	35.	-57.	1484.
Ground water outflow	84.	84.	83.	83.	83.	83.	83.	83.	83.	83.	84.	84.	1000.
Change in ground water storage	-86.	453.	1069.	622.	778.	-228.	-429.	-613.	-687.	-205.	-49.	-141.	484.

TABLE 111.--Annual water budget, Newcastle (2B2-1), Beaver River Basin

CALENDAR YEAR 1959													
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Tributary inflow	29.	35.	97.	401.	379.	277.	209.	179.	168.	219.	35.	29.	2057.
Releases from New Castle Reservoir	0.	0.	0.	12.	135.	129.	177.	135.	24.	0.	0.	0.	612.
Diversions to cropland	0.	0.	97.	413.	514.	406.	386.	314.	192.	219.	0.	0.	2536.
32 percent to root-zone	0.	0.	31.	132.	165.	130.	124.	100.	61.	70.	0.	0.	811.
Pumped irrigation water	0.	0.	0.	0.	728.	1233.	1513.	1345.	785.	0.	0.	0.	5604.
32 percent to root-zone	0.	0.	0.	0.	233.	395.	484.	430.	251.	0.	0.	0.	1793.
Precipitation on cropland	133.	924.	158.	0.	0.	32.	187.	510.	244.	237.	280.	863.	3569.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	133.	924.	189.	132.	398.	557.	795.	1041.	557.	307.	280.	863.	6174.
Potential consumptive use on irrigated cropland	70.	83.	126.	306.	997.	1730.	2178.	1930.	1112.	370.	91.	75.	9068.
Supply minus use	63.	841.	64.	-174.	-599.	-1173.	-1384.	-889.	-554.	-62.	189.	787.	-2894.
Cumulative soil moisture (maximum capacity-1,274 a.f.)	395.	1236.	1274.	1100.	501.	0.	0.	0.	0.	0.	189.	976.	-3562.
Consumptive use deficit	0.	0.	0.	0.	0.	-672.	-1384.	-889.	-554.	-62.	0.	0.	-3562.
Actual consumptive use	70.	83.	126.	306.	997.	1058.	795.	1041.	557.	307.	91.	75.	5506.
Addition to ground water	0.	0.	26.	0.	0.	0.	0.	0.	0.	0.	0.	0.	26.
Net water surface evaporation	2.	-4.	8.	19.	24.	36.	34.	25.	20.	16.	12.	-4.	188.
M and I consumptive use	2.	2.	3.	4.	4.	5.	6.	6.	4.	3.	3.	2.	44.
Supply to wetland and ground water	25.	37.	81.	258.	88.	-160.	-262.	-248.	-145.	130.	20.	31.	-145.
Precipitation on wetland	27.	189.	32.	0.	0.	7.	38.	104.	50.	48.	57.	176.	729.
Wetland consumptive use	12.	14.	21.	43.	72.	131.	220.	233.	159.	84.	20.	13.	1022.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													21033.
Consumptive use by native vegetation in addition to precipitation	13.	13.	26.	52.	104.	182.	273.	273.	182.	104.	26.	26.	1274.
Outflow plus ground water storage change	27.	198.	66.	163.	-88.	-466.	-717.	-650.	-435.	-9.	31.	168.	-1712.
Ground water outflow	84.	84.	83.	83.	83.	83.	83.	83.	83.	83.	84.	84.	1000.
Change in ground water storage	-57.	114.	-17.	80.	-171.	-549.	-800.	-733.	-518.	-92.	-53.	84.	-2712.

TABLE 112.--Annual water budget, Newcastle (2B2-1), Beaver River Basin

	CALENDAR YEAR											
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
	Acre-Feet											
Tributary inflow	33.	40.	51.	539.	395.	309.	223.	162.	180.	355.	40.	33.
Releases from New Castle Reservoir	0.	0.	0.	20.	221.	211.	291.	221.	40.	0.	0.	0.
Diversions to cropland	0.	0.	51.	559.	616.	520.	514.	383.	220.	355.	0.	0.
32 percent to root-zone	0.	0.	16.	179.	197.	166.	165.	123.	71.	114.	0.	0.
Pumped irrigation water	0.	0.	0.	0.	848.	1436.	1762.	1566.	914.	0.	0.	0.
32 percent to root-zone	0.	0.	0.	0.	271.	460.	564.	501.	292.	0.	0.	0.
Precipitation on cropland	327.	309.	126.	295.	75.	298.	75.	115.	306.	647.	755.	54.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	327.	309.	142.	473.	544.	924.	804.	739.	669.	761.	755.	54.
Potential consumptive use												
on irrigated cropland	70.	83.	126.	329.	1034.	1913.	2329.	1937.	1345.	336.	116.	72.
Supply minus use	257.	226.	17.	145.	-490.	-989.	-1525.	-1198.	-676.	424.	639.	-19.
Cumulative soil moisture												
(maximum capacity-1,274 a.f.)	1233.	1274.	1274.	1247.	784.	0.	0.	0.	0.	424.	1063.	1045.
Consumptive use deficit	0.	0.	0.	0.	0.	-204.	-1525.	-1198.	-676.	0.	0.	0.
Actual consumptive use	70.	83.	126.	329.	1034.	1709.	804.	739.	669.	336.	116.	72.
Addition to ground water	0.	185.	17.	145.	0.	0.	0.	0.	0.	0.	0.	0.
Net water surface evaporation	0.	2.	8.	16.	25.	36.	38.	30.	20.	12.	8.	3.
M and I consumptive use	2.	2.	3.	4.	4.	5.	6.	6.	4.	3.	3.	2.
Supply to wetland and ground water	31.	222.	40.	505.	118.	-147.	-259.	-277.	-167.	226.	29.	28.
Precipitation on wetland	67.	63.	26.	60.	15.	61.	15.	25.	62.	132.	154.	11.
Wetland consumptive use	12.	14.	21.	46.	74.	145.	236.	234.	192.	76.	25.	13.
Precipitation and consumptive use on idle land, native vegetation and town and community areas												
Consumptive use by native vegetation in addition to precipitation	17.	17.	34.	68.	136.	238.	357.	357.	238.	136.	34.	34.
Outflow plus ground water storage change	69.	254.	9.	451.	-77.	-469.	-836.	-844.	-535.	146.	124.	-8.
Ground water outflow	84.	84.	83.	83.	83.	83.	83.	83.	83.	83.	84.	84.
Change in ground water storage	-15.	170.	-74.	368.	-160.	-552.	-919.	-927.	-618.	63.	40.	-92.

19935.

1666.

-1715.

1000.

-2715.

TABLE 113.--Annual water budget, Newcastle (2B2-1), Beaver River Basin

CALENDAR YEAR 1961

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Tributary inflow	26.	32.	65.	345.	290.	242.	242.	201.	225.	165.	32.	26.	1891.
Releases from New Castle Reservoir	0.	0.	0.	56.	614.	586.	808.	614.	112.	0.	0.	0.	2790.
Diversions to cropland	0.	0.	65.	401.	904.	828.	1050.	815.	337.	165.	0.	0.	4565.
32 percent to root-zone	0.	0.	21.	128.	289.	265.	336.	261.	108.	53.	0.	0.	1461.
Pumped irrigation water	0.	0.	0.	0.	730.	1235.	1516.	1347.	785.	0.	0.	0.	5613.
32 percent to root-zone	0.	0.	0.	0.	234.	395.	485.	431.	251.	0.	0.	0.	1796.
Precipitation on cropland	241.	0.	712.	536.	187.	0.	557.	543.	949.	320.	270.	410.	4723.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	241.	0.	733.	664.	710.	660.	1378.	1235.	1308.	373.	270.	410.	7980.
Potential consumptive use													
on irrigated cropland	65.	89.	145.	309.	1006.	1955.	2368.	2018.	1003.	308.	86.	71.	9422.
Supply minus use	176.	-89.	587.	355.	-296.	-1294.	-989.	-784.	305.	65.	184.	339.	-1442.
Cumulative soil moisture													
(maximum capacity-1,274 a.f.)	1221.	1132.	1274.	1274.	978.	0.	0.	0.	305.	370.	554.	893.	
Consumptive use deficit	0.	0.	0.	0.	0.	-316.	-989.	-784.	0.	0.	0.	0.	-2089.
Actual consumptive use	65.	89.	145.	309.	1006.	1638.	1378.	1235.	1003.	308.	86.	71.	7333.
Addition to ground water	0.	0.	445.	355.	0.	0.	0.	0.	0.	0.	0.	0.	799.
Net water surface evaporation	1.	4.	3.	12.	24.	34.	28.	15.	11.	12.	12.	0.	156.
M and I consumptive use	2.	2.	3.	4.	4.	5.	6.	6.	4.	3.	3.	2.	44.
Supply to wetland and ground water	23.	26.	483.	611.	353.	129.	195.	102.	-37.	97.	17.	24.	2023.
Precipitation on wetland	49.	0.	145.	109.	38.	0.	114.	111.	194.	65.	55.	84.	965.
Wetland consumptive use	11.	15.	25.	43.	72.	148.	240.	244.	143.	70.	19.	12.	1042.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													27838.
Consumptive use by native vegetation in addition to precipitation	24.	24.	48.	96.	192.	336.	504.	504.	336.	192.	48.	48.	2352.
Outflow plus ground water storage change	37.	-13.	558.	582.	127.	-355.	-435.	-535.	-322.	-99.	5.	47.	-405.
Ground water outflow	84.	84.	83.	83.	83.	83.	83.	83.	83.	83.	84.	84.	1000.
Change in ground water storage	-47.	-97.	475.	499.	44.	-438.	-518.	-618.	-405.	-182.	-79.	-37.	-1405.

TABLE 114 .--Annual water budget, Newcastle (2B2-1), Beaver River Basin

	CALENDAR YEAR 1962												Annual
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	
	Acre-Feet												
Tributary inflow	21.	25.	37.	281.	267.	217.	199.	155.	136.	128.	25.	21.	1512.
Releases from New Castle Reservoir	0.	0.	0.	80.	884.	884.	1166.	884.	162.	0.	0.	0.	4060.
Diversions to cropland	0.	0.	37.	361.	1151.	1101.	1365.	1039.	298.	128.	0.	0.	5481.
32 percent to root-zone	0.	0.	12.	116.	368.	352.	437.	333.	95.	41.	0.	0.	1754.
Pumped irrigation water	0.	0.	0.	0.	761.	1288.	1581.	1406.	820.	0.	0.	0.	5857.
32 percent to root-zone	0.	0.	0.	0.	244.	412.	506.	450.	262.	0.	0.	0.	1874.
Precipitation on cropland	525.	1661.	938.	54.	589.	133.	169.	0.	439.	219.	32.	385.	5144.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	525.	1661.	950.	169.	1201.	898.	1112.	783.	796.	260.	32.	385.	8772.
Potential consumptive use													
on irrigated cropland	56.	85.	106.	378.	924.	1646.	2004.	1904.	1177.	368.	122.	68.	8836.
Supply minus use	469.	1576.	844.	-208.	277.	-748.	-892.	-1121.	-381.	-108.	-90.	317.	-64.
Cumulative soil moisture													
(maximum capacity-1,274 a.f.)	1274.	1274.	1274.	1066.	1274.	526.	0.	0.	0.	0.	0.	317.	-2066.
Consumptive use deficit	0.	0.	0.	0.	0.	0.	-366.	-1121.	-381.	-108.	-90.	0.	6770.
Actual consumptive use	56.	85.	106.	378.	924.	1646.	1638.	783.	796.	260.	32.	68.	2577.
Addition to ground water	88.	1576.	844.	0.	69.	0.	0.	0.	0.	0.	0.	0.	173.
Net water surface evaporation	-1.	-10.	1.	16.	19.	30.	36.	32.	22.	15.	14.	0.	44.
M and I consumptive use	2.	2.	3.	4.	4.	5.	6.	6.	4.	3.	3.	2.	
Supply to wetland and ground water	108.	1609.	865.	226.	586.	302.	380.	219.	-86.	69.	8.	19.	4305.
Precipitation on wetland	107.	339.	192.	11.	120.	27.	35.	0.	90.	45.	7.	79.	1051.
Wetland consumptive use	9.	14.	18.	53.	67.	124.	203.	230.	168.	84.	27.	12.	1008.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													30320.
Consumptive use by native vegetation in addition to precipitation	29.	29.	58.	116.	232.	406.	609.	609.	406.	232.	58.	58.	2842.
Outflow plus ground water storage change	177.	1905.	981.	68.	407.	-201.	-397.	-620.	-570.	-202.	-70.	28.	1506.
Ground water outflow	84.	84.	83.	83.	83.	83.	83.	83.	83.	83.	84.	84.	1000.
Change in ground water storage	93.	1821.	898.	-15.	324.	-284.	-480.	-703.	-653.	-285.	-154.	-56.	506.

TABLE 115.---Annual water budget, Newcastle (2B2-1), Beaver River Basin

CALENDAR YEAR 1963													
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Tributary inflow	18.	22.	35.	269.	223.	179.	152.	120.	124.	119.	22.	18.	1301.
Releases from New Castle Reservoir	0.	0.	0.	21.	233.	223.	308.	233.	42.	0.	0.	0.	1060.
Diversions to cropland	0.	0.	35.	290.	456.	402.	460.	353.	166.	119.	0.	0.	2278.
32 percent to root-zone	0.	0.	11.	93.	146.	129.	147.	113.	53.	38.	0.	0.	729.
Pumped irrigation water	0.	0.	0.	0.	958.	1622.	1991.	1770.	1032.	0.	0.	0.	7373.
32 percent to root-zone	0.	0.	0.	0.	307.	519.	637.	566.	330.	0.	0.	0.	2359.
Precipitation on cropland	54.	316.	295.	625.	0.	187.	0.	712.	1075.	191.	766.	7.	4227.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	54.	316.	306.	718.	452.	835.	784.	1391.	1458.	228.	766.	7.	7315.
Potential consumptive use on irrigated cropland	61.	116.	118.	270.	1179.	1607.	2098.	1991.	1250.	429.	113.	70.	9301.
Supply minus use	-7.	200.	188.	448.	-726.	-773.	-1313.	-600.	208.	-200.	652.	-63.	-1986.
Cumulative soil moisture (maximum capacity-1,274 a.f.)	310.	510.	699.	1147.	420.	0.	0.	0.	208.	8.	660.	597.	
Consumptive use deficit	0.	0.	0.	0.	0.	-353.	-1313.	-600.	0.	0.	0.	0.	-2266.
Actual consumptive use	61.	116.	118.	270.	1179.	1255.	784.	1391.	1250.	429.	113.	70.	7035.
Addition to ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Net water surface evaporation	3.	2.	6.	9.	29.	27.	40.	17.	10.	16.	8.	3.	171.
M and I consumptive use	2.	2.	3.	4.	4.	5.	6.	6.	4.	3.	3.	2.	44.
Supply to wetland and ground water	13.	18.	14.	185.	-29.	-278.	-371.	-350.	-231.	62.	11.	13.	-942.
Precipitation on wetland	11.	65.	60.	128.	0.	38.	0.	145.	220.	39.	156.	1.	864.
Wetland consumptive use	10.	20.	20.	38.	85.	122.	212.	241.	178.	97.	25.	12.	1060.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													24925.
Consumptive use by native vegetation in addition to precipitation	12.	12.	24.	48.	96.	168.	252.	252.	168.	96.	24.	24.	1176.
Outflow plus ground water storage change	2.	51.	31.	227.	-210.	-529.	-835.	-697.	-358.	-93.	119.	-22.	-2314.
Ground water outflow	84.	84.	83.	83.	83.	83.	83.	83.	83.	83.	84.	84.	1000.
Change in ground water storage	-82.	-33.	-52.	144.	-293.	-612.	-918.	-780.	-441.	-176.	35.	-106.	-3314.

TABLE 116. Annual water budget, Newcastle (2B2-1), Beaver River Basin

	CALENDAR YEAR 1964												Annual
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	
	Acre-Feet												
Tributary inflow	19.	22.	36.	275.	226.	182.	156.	133.	124.	117.	22.	19.	1331.
Releases from New Castle Reservoir	0.	0.	0.	46.	502.	479.	660.	502.	91.	0.	0.	0.	2280.
Diversions to cropland	0.	0.	36.	321.	728.	661.	816.	635.	215.	117.	0.	0.	3532.
32 percent to root-zone	0.	0.	11.	103.	233.	212.	261.	203.	69.	37.	0.	0.	1130.
Pumped irrigation water	0.	0.	0.	0.	932.	1577.	1935.	1720.	1003.	0.	0.	0.	7166.
32 percent to root-zone	0.	0.	0.	0.	298.	505.	619.	550.	321.	0.	0.	0.	2293.
Precipitation on cropland	173.	65.	812.	600.	395.	284.	320.	108.	119.	11.	647.	198.	3731.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	173.	65.	824.	703.	926.	1000.	1200.	862.	508.	48.	647.	198.	7154.
Potential consumptive use													
on irrigated cropland	65.	67.	106.	287.	898.	1607.	2344.	1917.	1039.	387.	80.	81.	8878.
Supply minus use	108.	-3.	718.	416.	29.	-607.	-1144.	-1055.	-530.	-339.	567.	117.	-1724.
Cumulative soil moisture													
(maximum capacity-1,274 a.f.)	705.	702.	1274.	1274.	1274.	667.	0.	0.	0.	0.	567.	683.	
Consumptive use deficit	0.	0.	0.	0.	0.	0.	-477.	-1055.	-530.	-339.	0.	0.	-2402.
Actual consumptive use	65.	67.	106.	287.	898.	1607.	1867.	862.	508.	48.	80.	81.	6477.
Addition to ground water	0.	0.	146.	416.	29.	0.	0.	0.	0.	0.	0.	0.	591.
Net water surface evaporation	2.	4.	2.	8.	18.	24.	33.	24.	19.	17.	9.	2.	161.
M and I consumptive use	2.	2.	3.	4.	4.	5.	6.	6.	4.	3.	3.	2.	44.
Supply to wetland and ground water													
Precipitation on wetland	15.	16.	166.	622.	203.	-85.	-103.	-149.	-198.	60.	10.	15.	574.
Wetland consumptive use	35.	13.	166.	123.	81.	58.	65.	22.	24.	2.	132.	40.	762.
Precipitation and consumptive use on idle land, native vegetation and town and community areas	11.	11.	18.	40.	65.	122.	237.	232.	148.	88.	18.	14.	1003.
Consumptive use by native vegetation in addition to precipitation													21982.
Outflow plus ground water storage change	19.	19.	38.	76.	152.	266.	399.	399.	266.	152.	38.	38.	1862.
Ground water outflow													
Change in ground water storage	21.	-1.	276.	629.	67.	-414.	-674.	-758.	-588.	-178.	87.	4.	-1529.
	84.	84.	83.	83.	83.	83.	83.	83.	83.	83.	84.	84.	1000.
	-63.	-85.	193.	546.	-16.	-497.	-757.	-841.	-671.	-261.	3.	-80.	-2529.

TABLE 117. --Annual water budget, Newcastle (2B2-1), Beaver River Basin

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
Tributary inflow	25.	30.	46.	368.	295.	236.	209.	176.	164.	148.	30.	25.	1752.
Releases from New Castle Reservoir	0.	0.	0.	60.	666.	635.	877.	666.	121.	0.	0.	0.	3025.
Diversions to cropland	0.	0.	46.	428.	961.	871.	1086.	842.	285.	148.	0.	0.	4667.
32 percent to root-zone	0.	0.	15.	137.	307.	279.	347.	269.	91.	47.	0.	0.	1494.
Pumped irrigation water	0.	0.	0.	0.	818.	1384.	1699.	1510.	881.	0.	0.	0.	6292.
32 percent to root-zone	0.	0.	0.	0.	262.	443.	544.	483.	282.	0.	0.	0.	2013.
Precipitation on cropland	266.	417.	514.	1330.	302.	83.	101.	201.	370.	115.	988.	1369.	6057.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	266.	417.	529.	1467.	871.	804.	992.	954.	743.	162.	988.	1369.	9564.
Potential consumptive use on irrigated cropland	81.	80.	111.	275.	859.	1386.	2119.	1805.	883.	370.	131.	74.	8175.
Supply minus use	185.	337.	418.	1192.	12.	-582.	-1128.	-851.	-140.	-207.	857.	1296.	1389.
Gumulative soil moisture (maximum capacity-1,274 a.f.)	868.	1205.	1274.	1274.	1274.	692.	0.	0.	0.	0.	857.	1274.	-1634.
Consumptive use deficit	0.	0.	0.	0.	0.	0.	-435.	-851.	-140.	-207.	0.	0.	6540.
Actual consumptive use	81.	80.	111.	275.	859.	1386.	1684.	954.	743.	162.	131.	74.	2432.
Addition to ground water	0.	0.	349.	1192.	12.	0.	0.	0.	0.	0.	0.	879.	126.
Net water surface evaporation	1.	1.	5.	1.	18.	26.	28.	21.	11.	16.	6.	-8.	44.
M and I consumptive use	2.	2.	3.	4.	4.	5.	6.	6.	4.	3.	3.	2.	3533.
Supply to wetland and ground water	22.	27.	373.	1478.	382.	118.	161.	62.	-103.	82.	21.	910.	1237.
Precipitation on wetland	54.	85.	105.	272.	62.	17.	21.	41.	76.	24.	202.	280.	935.
Wetland consumptive use	14.	13.	19.	38.	62.	105.	214.	218.	126.	84.	29.	13.	35685.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													
Consumptive use by native vegetation in addition to precipitation	25.	25.	50.	100.	200.	350.	525.	525.	350.	200.	50.	50.	2450.
Outflow plus ground water storage change	38.	74.	409.	1611.	182.	-319.	-558.	-640.	-504.	-179.	144.	1127.	1385.
Ground water outflow	84.	84.	83.	83.	83.	83.	83.	83.	83.	83.	84.	84.	1000.
Change in ground water storage	-46.	-10.	326.	1528.	99.	-402.	-641.	-723.	-587.	-262.	60.	1043.	385.

TABLE 118.--Representative potential consumptive use (calendar year 1958), Enterprise (2B2-2), Beaver River Basin

Land use	Acres	MONTHLY CONSUMPTIVE USE, Inches												Annual Use	
		Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Inches	Acre-Feet
		Irrigated Cropland													
Alfalfa	1,155	.23	.27	.41	.80	3.60	5.51	6.84	5.92	3.41	1.21	.30	.24	28.73	2,765
Small grain	1,548	.14	.17	.25	.92	2.84	6.04	4.31	1.40	.86	.54	.18	.15	17.81	2,297
Corn	93	.14	.17	.25	.50	1.13	2.78	5.30	5.92	3.17	.54	.18	.15	20.24	157
Sugar beets	7	.14	.17	.25	.50	1.50	3.46	6.28	6.82	4.27	1.06	.18	.15	24.79	14
Potatoes	1,949	.14	.17	.25	.50	.83	1.95	5.24	7.26	4.34	.54	.18	.15	21.56	3,502
Hayland	81	.23	.27	.41	1.38	3.00	4.48	5.67	5.08	3.00	1.71	.30	.24	25.76	174
Suburban crops	300	.23	.27	.41	1.38	3.00	4.48	5.67	5.08	3.00	1.71	.30	.24	25.76	644
Total use	5,133	.17	.20	.30	.76	2.23	4.19	5.35	5.00	2.96	.78	.22	.18	22.33 ^a	9,554
Wetlands (Phreatophytes)															
Sage and rabbitbrush w/	114	.14	.17	.25	.50	.83	1.56	2.71	2.90	2.00	1.04	.24	.15	12.50	119
Greasewood	42	.14	.17	.25	.50	.83	1.56	2.71	2.90	2.00	1.04	.24	.15	12.50	44
Total use	156	.14	.17	.25	.50	.83	1.56	2.71	2.90	2.00	1.04	.24	.15	12.50 ^a	163
Consumptive Use of Precipitation															
Idle land	1,211													8.20	828
Native vegetation	8,779													8.20	5,999
Town and community areas	471													8.20	322
Water Surface Evaporation															
Net evaporation	39	.31	.92	2.15	4.00	6.45	10.76	12.30	7.07	6.77	5.23	3.69	.62	60.27	195
GRAND TOTAL	15,789													12.96 ^a	17,060

^aWeighted value.

TABLE 119--Annual water budget, Enterprise (2B2-2), Beaver River Basin

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	CALENDAR YEAR 1958												
	Acre-Feet												
Releases from Enterprise Reservoir	0.	0.	0.	87.	956.	913.	1260.	956.	174.	0.	0.	0.	4346.
Tributary inflow	63.	66.	69.	99.	168.	109.	72.	72.	69.	66.	66.	66.	982.
Diversions to cropland	0.	0.	0.	87.	956.	913.	1260.	956.	174.	0.	0.	0.	4346.
28 percent to root-zone	0.	0.	0.	24.	268.	256.	353.	268.	49.	0.	0.	0.	1217.
Pumped irrigation water	0.	0.	0.	0.	784.	1496.	1994.	1781.	1068.	0.	0.	0.	7123.
32 percent to root-zone	0.	0.	0.	0.	251.	479.	638.	570.	342.	0.	0.	0.	2279.
Precipitation on cropland	299.	231.	355.	389.	252.	201.	231.	299.	385.	231.	385.	240.	3508.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	299.	231.	355.	414.	771.	935.	1222.	1137.	775.	231.	385.	240.	7004.
Potential consumptive use on irrigated cropland	71.	84.	128.	325.	953.	1792.	2290.	2141.	1267.	333.	93.	77.	9554.
Supply minus use	228.	147.	227.	88.	-182.	-856.	-1068.	-1004.	-492.	-102.	292.	163.	-2550.
Cumulative soil moisture (maximum capacity-1,470 a.f.)	1214.	1360.	1500.	1500.	1318.	461.	0.	0.	0.	0.	292.	455.	-2204.
Consumptive use deficit	0.	0.	0.	0.	0.	0.	-606.	-1004.	-492.	-102.	0.	0.	7350.
Actual consumptive use	71.	84.	128.	325.	953.	1792.	1683.	1137.	775.	231.	93.	77.	176.
Addition to ground water	0.	0.	87.	88.	0.	0.	0.	0.	0.	0.	0.	0.	196.
Net water surface evaporation	1.	3.	7.	13.	21.	35.	40.	23.	22.	17.	12.	2.	190.
M and I consumptive use	7.	10.	13.	17.	17.	19.	27.	27.	19.	13.	11.	10.	190.
Supply to wetland and ground water	55.	53.	137.	220.	567.	234.	274.	140.	-188.	36.	43.	54.	1623.
Precipitation on wetland	9.	7.	11.	12.	8.	6.	7.	9.	12.	7.	12.	7.	107.
Wetland consumptive use	2.	2.	3.	7.	11.	20.	35.	38.	26.	13.	3.	2.	162.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													7174.
Outflow plus ground water storage change	62.	58.	144.	225.	564.	220.	246.	112.	-202.	30.	52.	60.	1567.
Ground water outflow	250.	250.	250.	250.	250.	250.	250.	250.	250.	250.	250.	250.	3000.
Change in ground water storage	-188.	-192.	-106.	-25.	314.	-30.	-4.	-138.	-452.	-220.	-198.	-190.	-1433.

TABLE 120.--Annual water budget, Enterprise (2B2-2), Beaver River Basin

CALENDAR YEAR 1959

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Releases from Enterprise Reservoir	0.	0.	0.	82.	922.	844.	1190.	901.	267.	0.	0.	0.	4206.
Tributary inflow	60.	63.	66.	96.	162.	105.	69.	69.	66.	63.	64.	63.	946.
Diversions to cropland	0.	0.	0.	82.	922.	844.	1190.	901.	267.	0.	0.	0.	4206.
28 percent to root-zone	0.	0.	0.	23.	258.	236.	333.	252.	75.	0.	0.	0.	1178.
Pumped irrigation water	0.	0.	0.	0.	745.	1422.	1896.	1693.	1016.	0.	0.	0.	6772.
32 percent to root-zone	0.	0.	0.	0.	238.	455.	607.	542.	325.	0.	0.	0.	2167.
Precipitation on cropland	257.	197.	308.	334.	214.	175.	201.	257.	334.	197.	334.	205.	3013.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	257.	197.	308.	357.	710.	867.	1141.	1051.	734.	197.	334.	205.	6358.
Potential consumptive use													
on irrigated cropland	71.	84.	128.	325.	953.	1792.	2290.	2141.	1267.	333.	93.	77.	9554.
Supply minus use	185.	112.	180.	31.	-243.	-925.	-1149.	-1090.	-534.	-136.	241.	129.	-3196.
Cumulative soil moisture													
(maximum capacity-1,470 a.f.)	640.	752.	933.	964.	721.	0.	0.	0.	0.	0.	241.	369.	-3113.
Consumptive use deficit	0.	0.	0.	0.	0.	-204.	-1149.	-1090.	-534.	-136.	0.	0.	6442.
Actual consumptive use	71.	84.	128.	325.	953.	1588.	1141.	1051.	734.	197.	93.	77.	0.
Addition to ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	208.
Net water surface evaporation	1.	3.	7.	17.	23.	37.	39.	29.	20.	17.	12.	2.	190.
M and I consumptive use	7.	10.	13.	17.	17.	19.	27.	27.	19.	13.	11.	10.	1409.
Supply to wetland and ground water	52.	50.	46.	121.	547.	202.	253.	120.	-106.	33.	40.	51.	92.
Precipitation on wetland	8.	6.	9.	10.	6.	5.	6.	8.	10.	6.	10.	6.	162.
Wetland consumptive use	2.	2.	3.	7.	11.	20.	35.	38.	26.	13.	3.	2.	6169.
Precipitation and consumptive use													
on idle land, native vegetation													
and town and community areas													
Outflow plus ground water storage													
change	58.	54.	52.	124.	543.	187.	224.	90.	-122.	26.	47.	55.	1339.
Ground water outflow	250.	250.	250.	250.	250.	250.	250.	250.	250.	250.	250.	250.	3000.
Change in ground water storage	-192.	-196.	-198.	-126.	293.	-63.	-26.	-160.	-372.	-224.	-203.	-195.	-1661.

TABLE 121.--Annual water budget, Enterprise (2B2-2), Beaver River Basin

	CALENDAR YEAR 1960												
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Releases from Enterprise Reservoir	0.	0.	0.	118.	445.	490.	739.	594.	58.	0.	0.	0.	2444.
Tributary inflow	60.	63.	65.	94.	160.	104.	67.	68.	65.	63.	63.	63.	935.
Diversions to cropland	0.	0.	0.	118.	445.	490.	739.	594.	58.	0.	0.	0.	2444.
28 percent to root-zone	0.	0.	0.	33.	125.	137.	207.	166.	16.	0.	0.	0.	684.
Pumped irrigation water	0.	0.	0.	0.	864.	1650.	2200.	1965.	1179.	0.	0.	0.	7859.
32 percent to root-zone	0.	0.	0.	0.	276.	528.	704.	629.	377.	0.	0.	0.	2515.
Precipitation on cropland	244.	188.	287.	312.	201.	163.	188.	244.	312.	188.	312.	192.	2836.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	244.	188.	287.	345.	602.	828.	1099.	1039.	706.	188.	312.	192.	6035.
Potential consumptive use													
on irrigated cropland	71.	84.	128.	350.	989.	1981.	2448.	2148.	1533.	303.	118.	74.	10227.
Supply minus use	173.	104.	159.	-5.	-387.	-1153.	-1349.	-1109.	-827.	-115.	194.	119.	-4192.
Cumulative soil moisture													
(maximum capacity-1,470 a.f.)	542.	645.	804.	800.	413.	0.	0.	0.	0.	0.	194.	313.	-4140.
Consumptive use deficit	0.	0.	0.	0.	0.	-740.	-1349.	-1109.	-827.	-115.	0.	0.	6087.
Actual consumptive use	71.	84.	128.	350.	989.	1241.	1099.	1039.	706.	188.	118.	74.	0.
Addition to ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	215.
Net water surface evaporation	1.	3.	7.	17.	25.	39.	39.	30.	21.	17.	13.	2.	190.
M and I consumptive use	7.	10.	13.	17.	17.	19.	27.	27.	19.	13.	11.	10.	-226.
Supply to wetland and ground water	52.	50.	45.	145.	162.	-129.	-171.	-190.	-311.	33.	39.	51.	86.
Precipitation on wetland	7.	6.	9.	9.	6.	5.	6.	7.	9.	6.	9.	6.	173.
Wetland consumptive use	2.	2.	3.	7.	11.	22.	38.	38.	31.	12.	4.	2.	5766.
Precipitation and consumptive use													
on idle land, native vegetation													
and town and community areas													
Outflow plus ground water storage													
change	57.	54.	50.	148.	156.	-147.	-203.	-221.	-333.	26.	45.	55.	-312.
Ground water outflow	250.	250.	250.	250.	250.	250.	250.	250.	250.	250.	250.	250.	3000.
Change in ground water storage	-193.	-196.	-200.	-102.	-94.	-397.	-453.	-471.	-583.	-224.	-205.	-195.	-3312.

TABLE 122.--Annual water budget, Enterprise (2B2-2), Beaver River Basin

CALENDAR YEAR 1961													
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Releases from Enterprise Reservoir	0.	0.	0.	12.	202.	152.	167.	99.	25.	0.	0.	0.	657.
Tributary inflow	67.	70.	73.	106.	179.	116.	76.	76.	73.	70.	70.	70.	1045.
Diversions to cropland	0.	0.	0.	12.	202.	152.	167.	99.	25.	0.	0.	0.	657.
28 percent to root-zone	0.	0.	0.	3.	57.	43.	47.	28.	7.	0.	0.	0.	184.
Pumped irrigation water	0.	0.	0.	0.	765.	1460.	1946.	1738.	1043.	0.	0.	0.	6951.
32 percent to root-zone	0.	0.	0.	0.	245.	467.	623.	556.	334.	0.	0.	0.	2224.
Precipitation on cropland	184.	60.	500.	548.	282.	154.	419.	612.	834.	218.	389.	248.	4449.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	184.	60.	500.	551.	584.	664.	1089.	1196.	1175.	218.	389.	248.	6857.
Potential consumptive use													
on irrigated cropland	66.	91.	148.	329.	962.	2024.	2488.	2238.	1143.	278.	87.	72.	9926.
Supply minus use	118.	-31.	353.	222.	-378.	-1360.	-1400.	-1043.	31.	-59.	302.	176.	-3069.
Cumulative soil moisture													
(maximum capacity-1,470 a.f.)	431.	400.	753.	975.	597.	0.	0.	0.	31.	0.	302.	478.	
Consumptive use deficit	0.	0.	0.	0.	0.	-764.	-1400.	-1043.	0.	-28.	0.	0.	-3234.
Actual consumptive use	66.	91.	148.	329.	962.	1260.	1089.	1196.	1143.	250.	87.	72.	6692.
Addition to ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Net water surface evaporation	2.	4.	5.	13.	24.	34.	31.	16.	13.	14.	12.	2.	170.
M and I consumptive use	7.	10.	13.	17.	17.	19.	27.	27.	19.	13.	11.	10.	190.
Supply to wetland and ground water	58.	56.	55.	85.	38.	-294.	-485.	-452.	-275.	43.	47.	58.	-1066.
Precipitation on wetland	6.	2.	15.	17.	9.	5.	13.	19.	25.	7.	12.	8.	135.
Wetland consumptive use	2.	2.	4.	7.	11.	23.	38.	39.	23.	11.	3.	2.	165.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													9052.
Outflow plus ground water storage change	62.	55.	66.	95.	36.	-313.	-510.	-473.	-273.	39.	56.	64.	-1097.
Ground water outflow	250.	250.	250.	250.	250.	250.	250.	250.	250.	250.	250.	250.	3000.
Change in ground water storage	-188.	-195.	-184.	-155.	-214.	-563.	-760.	-723.	-523.	-211.	-194.	-186.	-4097.

TABLE 124--Annual water budget, Enterprise (2B2-2), Beaver River Basin

	CALENDAR YEAR 1963												
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Releases from Enterprise Reservoir	0.	0.	0.	57.	631.	604.	832.	631.	115.	0.	0.	0.	2870.
Tributary inflow	66.	69.	73.	105.	177.	115.	76.	76.	73.	69.	69.	69.	1037.
Diversions to cropland	0.	0.	0.	57.	631.	604.	832.	631.	115.	0.	0.	0.	2870.
28 percent to root-zone	0.	0.	0.	16.	177.	169.	233.	177.	32.	0.	0.	0.	804.
Pumped irrigation water	0.	0.	0.	0.	745.	1423.	1898.	1694.	1017.	0.	0.	0.	6777.
32 percent to root-zone	0.	0.	0.	0.	238.	455.	607.	542.	325.	0.	0.	0.	2169.
Precipitation on cropland	103.	364.	201.	441.	0.	235.	43.	826.	817.	282.	1035.	0.	4346.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	103.	364.	201.	457.	415.	860.	883.	1544.	1175.	282.	1035.	0.	7318.
Potential consumptive use on irrigated cropland	62.	118.	120.	287.	1127.	1664.	2205.	2208.	1425.	386.	115.	71.	9790.
Supply minus use	41.	246.	81.	169.	-712.	-805.	-1322.	-664.	-250.	-104.	920.	-71.	-2471.
Cumulative soil moisture (maximum capacity-1,470 a.f.)	310.	555.	637.	806.	94.	0.	0.	0.	0.	0.	920.	848.	
Consumptive use deficit	0.	0.	0.	0.	0.	-711.	-1322.	-664.	-250.	-104.	0.	0.	-3051.
Actual consumptive use	62.	118.	120.	287.	1127.	953.	883.	1544.	1175.	282.	115.	71.	6739.
Addition to ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Net water surface evaporation	2.	2.	8.	11.	30.	28.	42.	18.	13.	16.	7.	4.	181.
N and I consumptive use	7.	10.	13.	17.	17.	19.	27.	27.	19.	13.	11.	10.	190.
Supply to wetland and ground water	57.	57.	52.	118.	346.	47.	-2.	-57.	-202.	40.	51.	55.	563.
Precipitation on wetland	3.	11.	6.	13.	0.	7.	1.	25.	25.	9.	31.	0.	132.
Wetland consumptive use	2.	3.	3.	6.	13.	19.	34.	39.	29.	16.	4.	2.	169.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													8851.
Outflow plus ground water storage change	58.	65.	55.	126.	333.	36.	-34.	-71.	-206.	33.	79.	54.	527.
Ground water outflow	250.	250.	250.	250.	250.	250.	250.	250.	250.	250.	250.	250.	3000.
Change in ground water storage	-192.	-185.	-195.	-124.	83.	-214.	-284.	-321.	-456.	-217.	-171.	-196.	-2473.

TABLE 125.--Annual water budget, Enterprise (2B2-2), Beaver River Basin

CALENDAR YEAR 1964

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Releases from Enterprise Reservoir	0.	0.	0.	21.	229.	217.	302.	229.	42.	0.	0.	0.	1040.
Tributary inflow	63.	66.	69.	100.	169.	109.	72.	72.	69.	66.	66.	66.	986.
Diversions to cropland	0.	0.	0.	21.	229.	217.	302.	229.	42.	0.	0.	0.	1040.
28 percent to root-zone	0.	0.	0.	6.	64.	61.	85.	64.	12.	0.	0.	0.	291.
Pumped irrigation water	0.	0.	0.	0.	731.	1395.	1860.	1661.	996.	0.	0.	0.	6642.
32 percent to root-zone	0.	0.	0.	0.	234.	446.	595.	532.	319.	0.	0.	0.	2125.
Precipitation on cropland	265.	128.	667.	471.	342.	210.	308.	406.	171.	17.	299.	312.	3597.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	265.	128.	667.	476.	640.	717.	988.	1002.	502.	17.	299.	312.	6014.
Potential consumptive use on irrigated cropland	66.	69.	107.	305.	859.	1664.	2464.	2126.	1184.	349.	82.	82.	9358.
Supply minus use	199.	60.	560.	171.	-218.	-948.	-1476.	-1124.	-682.	-332.	218.	230.	-3344.
Cumulative soil moisture (maximum capacity-1,470 a.f.)	1047.	1107.	1500.	1500.	1282.	334.	0.	0.	0.	0.	218.	447.	
Consumptive use deficit	0.	0.	0.	0.	0.	0.	-1142.	-1124.	-682.	-332.	0.	0.	-3281.
Actual consumptive use	66.	69.	107.	305.	859.	1664.	1322.	1002.	502.	17.	82.	82.	6077.
Addition to ground water	0.	0.	167.	171.	0.	0.	0.	0.	0.	0.	0.	0.	338.
Net water surface evaporation	1.	3.	4.	10.	20.	26.	35.	23.	19.	17.	13.	1.	173.
M and I consumptive use	7.	10.	13.	17.	17.	19.	27.	27.	19.	13.	11.	10.	190.
Supply to wetland and ground water	55.	53.	219.	259.	63.	-226.	-368.	-345.	-258.	36.	42.	55.	-415.
Precipitation on wetland	8.	4.	20.	14.	10.	6.	9.	12.	5.	1.	9.	9.	109.
Wetland consumptive use	2.	2.	3.	6.	10.	19.	38.	38.	24.	14.	3.	2.	160.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													7309.
Outflow plus ground water storage change	61.	55.	236.	268.	64.	-239.	-396.	-370.	-277.	22.	49.	62.	-466.
Ground water outflow	250.	250.	250.	250.	250.	250.	250.	250.	250.	250.	250.	250.	3000.
Change in ground water storage	-189.	-195.	-14.	18.	-186.	-489.	-646.	-620.	-527.	-228.	-201.	-188.	-3466.

TABLE 126.--Annual water budget, Enterprise (2B2-2), Beaver River Basin

CALENDAR YEAR 1965

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Releases from Enterprise Reservoir	0.	0.	0.	73.	803.	766.	1059.	803.	146.	0.	0.	0.	3650.
Tributary inflow	68.	72.	75.	108.	183.	119.	78.	78.	75.	72.	72.	72.	1072.
Diversions to cropland	0.	0.	0.	73.	803.	766.	1059.	803.	146.	0.	0.	0.	3650.
28 percent to root-zone	0.	0.	0.	20.	225.	214.	297.	225.	41.	0.	0.	0.	1022.
Pumped irrigation water	0.	0.	0.	0.	455.	869.	1159.	1035.	621.	0.	0.	0.	4139.
32 percent to root-zone	0.	0.	0.	0.	146.	278.	371.	331.	199.	0.	0.	0.	1324.
Precipitation on cropland	201.	269.	372.	1001.	317.	81.	505.	205.	351.	21.	637.	821.	4782.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	201.	269.	372.	1021.	687.	574.	1172.	761.	590.	21.	637.	821.	7129.
Potential consumptive use													
on irrigated cropland	83.	82.	113.	293.	821.	1435.	2228.	2002.	1007.	333.	133.	75.	8605.
Supply minus use	119.	188.	259.	729.	-134.	-862.	-1055.	-1241.	-416.	-312.	504.	746.	-1476.
Cumulative soil moisture													
(maximum capacity-1,470 a.f.)	566.	754.	1013.	1500.	1366.	504.	0.	0.	0.	0.	504.	1250.	
Consumptive use deficit	0.	0.	0.	0.	0.	0.	-551.	-1241.	-416.	-312.	0.	0.	-2521.
Actual consumptive use	83.	82.	113.	293.	821.	1435.	1676.	761.	590.	21.	133.	75.	6084.
Addition to ground water	0.	0.	0.	242.	0.	0.	0.	0.	0.	0.	0.	0.	242.
Net water surface evaporation	2.	2.	6.	5.	19.	27.	27.	22.	12.	17.	10.	-3.	148.
M and I consumptive use	7.	10.	13.	17.	17.	19.	27.	27.	19.	13.	11.	10.	190.
Supply to wetland and ground water	59.	60.	56.	380.	579.	347.	416.	276.	-50.	42.	51.	65.	2280.
Precipitation on wetland	6.	8.	11.	30.	10.	2.	15.	6.	11.	1.	19.	25.	145.
Wetland consumptive use	2.	2.	3.	6.	9.	16.	34.	35.	21.	13.	4.	2.	149.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													9722.
Outflow plus ground water storage change	63.	66.	64.	405.	580.	333.	397.	247.	-60.	29.	66.	88.	2276.
Ground water outflow	250.	250.	250.	250.	250.	250.	250.	250.	250.	250.	250.	250.	3000.
Change in ground water storage	-187.	-184.	-186.	155.	330.	83.	147.	-3.	-310.	-221.	-184.	-162.	-724.

TABLE 127.--Representative potential consumptive use, (calendar year 1963), Junction (2B2-3), Beaver River Basin

Land use	Acres	MONTHLY CONSUMPTIVE USE, Inches												Annual use	
		Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Inches	Acre-foot
		Irrigated Cropland													
Alfalfa	8,035	.18	.39	.41	.99	4.71	5.54	7.61	6.73	4.45	1.49	.32	.23	33.04	22,125
Small grain	4,788	.11	.24	.25	.78	3.88	5.98	5.14	1.65	1.12	.73	.20	.14	20.23	8,074
Corn	275	.11	.24	.25	.45	1.70	2.94	6.24	6.80	4.54	.73	.20	.14	24.35	588
Sugar beets	47	.11	.24	.25	.45	1.79	3.72	6.92	7.62	1.98	.73	.20	.14	24.17	95
Potatoes	2,903	.11	.24	.25	.45	1.18	2.30	6.65	8.38	5.39	.73	.20	.14	26.04	6,299
Orchards	7	.18	.39	.41	.90	4.75	5.54	7.61	6.73	4.45	2.34	.32	.23	33.85	20
Hayland	41	.18	.39	.41	1.35	3.93	4.51	6.31	5.78	3.91	2.20	.32	.23	29.50	101
Pasture	15	.18	.39	.41	1.35	3.93	4.51	6.31	5.78	3.91	2.20	.32	.23	29.50	37
Suburban crop	200	.18	.29	.41	1.35	3.93	4.51	6.31	5.78	3.91	2.20	.32	.23	29.50	492
Total use	16,311	.14	.32	.33	.83	3.77	5.02	6.67	5.52	3.62	1.13	.26	.18	27.81 ^b	37,799 ^a
Wetlands (Phreatophytes)															
Sage and rabbitbrush W1	428	.11	.24	.25	.45	1.09	1.57	3.02	3.30	2.60	1.41	.26	.14	14.45	515
Willow and cottonwoods W2	8	.29	.78	1.15	2.47	6.19	7.01	9.74	8.83	6.15	3.69	.82	.43	47.55	32
Greasewood W1	586	.11	.24	.25	.45	1.09	1.57	3.02	3.30	2.60	1.41	.26	.14	14.45	705
Total use	1,022	.12	.25	.26	.47	1.13	1.61	3.06	3.34	2.63	1.42	.26	.14	14.70 ^b	1,252
Consumptive Use of Precipitation															
Idle land	6,909													10.16	5,850
Native vegetation	28,858													10.16	24,431
Town and community areas	1,090													10.16	923
Water Surface Evaporation															
Net evaporation	151	.77	.55	2.37	3.42	9.13	8.66	12.71	5.56	4.12	5.01	2.21	1.10	55.61	699
GRAND TOTAL	54,341													15.64 ^b	70,954

^aPotential consumptive use shown on water budget of 37,799 Acre-Feet due to rounding error by computer.
^bWeighted value.

TABLE 128.--Annual water budget, Junction (2B2-3), Beaver River Basin

CALENDAR YEAR 1958													
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Ground water inflow from other watersheds	417.	417.	417.	417.	416.	416.	416.	416.	417.	417.	417.	417.	5000.
Tributary inflow	100.	151.	201.	703.	1808.	854.	251.	251.	201.	201.	151.	151.	5023.
Pumped irrigation water	0.	0.	0.	0.	5208.	9214.	11617.	8813.	5208.	0.	0.	0.	40060.
38 percent to root-zone	0.	0.	0.	0.	1979.	3501.	4414.	3349.	1979.	0.	0.	0.	15223.
Precipitation on cropland	951.	734.	1128.	1237.	802.	639.	734.	951.	1223.	734.	1223.	761.	11116.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	951.	734.	1128.	1237.	2781.	4140.	5148.	4300.	3202.	734.	1223.	761.	26339.
Potential consumptive use													
on irrigated cropland	279.	436.	449.	1221.	5059.	7688.	8293.	8308.	4591.	1297.	369.	312.	38303.
Supply minus use	673.	298.	679.	16.	-2278.	-3548.	-3144.	-4008.	-1389.	-563.	854.	450.	-11965.
Cumulative soil moisture													
(maximum capacity-5,628 a.f.)	4067.	4365.	5044.	5060.	2782.	0.	0.	0.	0.	0.	854.	1304.	
Consumptive-use deficit	0.	0.	0.	0.	0.	-766.	-3144.	-4008.	-1389.	-563.	0.	0.	-9871.
Actual consumptive use	279.	436.	449.	1221.	5059.	6922.	5148.	4300.	3202.	734.	369.	312.	28432.
Addition to ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Net water surface evaporation	4.	10.	25.	50.	83.	135.	163.	90.	83.	66.	47.	7.	763.
M and I consumptive use	1.	1.	1.	2.	2.	2.	3.	3.	2.	2.	1.	1.	21.
Supply to wetland and ground water													
Precipitation on wetland	512.	557.	592.	1068.	160.	-2369.	-3914.	-2775.	-1446.	550.	520.	560.	-5984.
Wetland consumptive use	60.	46.	71.	78.	50.	40.	46.	60.	77.	46.	77.	48.	698.
Precipitation and consumptive use on idle land, native vegetation and town and community areas	14.	21.	22.	43.	95.	154.	239.	315.	209.	102.	23.	15.	1254.
Change in ground water storage	559.	581.	640.	1102.	115.	-2483.	-4107.	-3031.	-1579.	494.	574.	593.	-6539.

TABLE 12a--Annual water budget, Junction (2B2-3), Beaver River Basin

	CALENDAR YEAR 1959												
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Ground water inflow from other watersheds	417.	417.	417.	417.	416.	416.	416.	416.	417.	417.	417.	417.	5000.
Tributary inflow	86.	130.	173.	605.	1555.	734.	216.	216.	173.	173.	130.	130.	4321.
Pumped irrigation water	0.	0.	0.	0.	5771.	10211.	12874.	9767.	5771.	0.	0.	0.	44395.
38 percent to root-zone	0.	0.	0.	0.	2193.	3880.	4892.	3711.	2193.	0.	0.	0.	16870.
Precipitation on cropland	816.	625.	979.	1060.	680.	557.	639.	816.	1060.	625.	1060.	652.	9569.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	816.	625.	979.	1060.	2873.	4437.	5531.	4527.	3253.	625.	1060.	652.	26438.
Potential consumptive use on irrigated cropland	281.	286.	583.	1472.	4141.	8593.	10271.	7460.	4135.	1182.	396.	260.	39060.
Supply minus use	534.	340.	396.	-412.	-1268.	-4156.	-4740.	-2933.	-882.	-557.	664.	393.	-12621.
Cumulative soil moisture (maximum capacity-5,628 a.f.)	1838.	2178.	2574.	2162.	894.	0.	0.	0.	0.	0.	664.	1057.	
Consumptive use deficit	0.	0.	0.	0.	0.	-3262.	-4740.	-2933.	-882.	-557.	0.	0.	-12375.
Actual consumptive use	281.	286.	583.	1472.	4141.	5331.	5531.	4527.	3253.	625.	396.	260.	26686.
Addition to ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Net water surface evaporation	5.	11.	27.	68.	91.	142.	149.	111.	79.	65.	48.	8.	801.
M and I consumptive use	1.	1.	1.	2.	2.	2.	3.	3.	2.	2.	1.	1.	21.
Supply to wetland and ground water	497.	535.	562.	952.	-315.	-2874.	-4412.	-3193.	-1684.	523.	498.	538.	-8371.
Precipitation on wetland	51.	39.	61.	66.	43.	35.	40.	51.	66.	39.	66.	41.	601.
Wetland consumptive use	14.	14.	29.	52.	78.	173.	296.	283.	188.	93.	25.	13.	1257.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													21672.
Change in ground water storage	535.	560.	595.	967.	-350.	-3012.	-4668.	-3425.	-1806.	469.	540.	567.	-9027.

TABLE 130.--Annual water budget, Junction (2B2-3), Beaver River Basin

	CALENDAR YEAR 1960												
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Ground water inflow from other watersheds	417.	417.	417.	417.	416.	416.	416.	416.	417.	417.	417.	417.	5000.
Tributary inflow	81.	121.	162.	567.	1458.	688.	202.	202.	162.	162.	121.	121.	4047.
Pumped irrigation water	0.	0.	0.	0.	6872.	12159.	15331.	11630.	6872.	0.	0.	0.	52864.
38 percent to root-zone	0.	0.	0.	0.	2611.	4620.	5826.	4419.	2611.	0.	0.	0.	20088.
Precipitation on cropland	775.	598.	911.	992.	639.	517.	598.	775.	992.	598.	992.	612.	8999.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	775.	598.	911.	992.	3250.	5137.	6424.	5194.	3604.	598.	992.	612.	29087.
Potential consumptive use on irrigated cropland	206.	288.	718.	1441.	4501.	8449.	9720.	7243.	4998.	1164.	472.	271.	39471.
Supply minus use	568.	310.	193.	-449.	-1251.	-3312.	-3296.	-2049.	-1395.	-566.	520.	341.	-10386.
Cumulative soil moisture (maximum capacity-5,628 a.f.)	1625.	1935.	2128.	1679.	427.	0.	0.	0.	0.	0.	520.	862.	-10190.
Consumptive use deficit	0.	0.	0.	0.	0.	-2884.	-3296.	-2049.	-1395.	-566.	0.	0.	-10190.
Actual consumptive use	206.	288.	718.	1441.	4501.	5564.	6424.	5194.	3604.	598.	472.	271.	29282.
Addition to ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Net water surface evaporation	5.	12.	27.	65.	98.	152.	148.	117.	83.	66.	49.	8.	830.
M and I consumptive use	1.	1.	1.	2.	2.	2.	3.	3.	2.	2.	1.	1.	21.
Supply to wetland and ground water	492.	525.	551.	917.	-837.	-3670.	-5359.	-3922.	-2117.	511.	488.	529.	-11893.
Precipitation on wetland	49.	37.	57.	62.	40.	32.	37.	49.	62.	37.	62.	38.	563.
Wetland consumptive use	10.	14.	35.	51.	85.	170.	280.	275.	227.	92.	29.	13.	1282.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													20301.
Change in ground water storage	530.	549.	572.	928.	-882.	-3807.	-5602.	-4148.	-2282.	456.	521.	554.	-12611.

TABLE 131.--Annual water budget, Junction (2B2-3), Beaver River Basin

	CALENDAR YEAR 1961													
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual	
	Acre-Feet													
Ground water inflow from other watersheds	417.	417.	417.	417.	416.	416.	416.	416.	417.	417.	417.	417.	5000.	
Tributary inflow	126.	189.	253.	884.	2274.	1074.	316.	316.	253.	253.	189.	189.	6316.	
Pumped irrigation water	0.	0.	0.	0.	6029.	10666.	13449.	10202.	6029.	0.	0.	0.	46375.	
38 percent to root-zone	0.	0.	0.	0.	2291.	4053.	5111.	3877.	2291.	0.	0.	0.	17622.	
Precipitation on cropland	584.	190.	1590.	1740.	897.	489.	1332.	1944.	2651.	693.	1237.	788.	14136.	
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
Total root-zone supply	584.	190.	1590.	1740.	3188.	4542.	6443.	5820.	4942.	693.	1237.	788.	31759.	
Potential consumptive use on irrigated cropland	249.	352.	571.	1366.	4424.	8420.	9720.	7411.	3797.	1089.	318.	263.	37979.	
Supply minus use	335.	-162.	1020.	374.	-1236.	-3878.	-3277.	-1591.	1145.	-396.	919.	526.	-6220.	
Cumulative soil moisture (maximum capacity-5,628 a.f.)	1197.	1035.	2055.	2429.	1193.	0.	0.	0.	1145.	749.	1668.	2194.		
Consumptive use deficit	0.	0.	0.	0.	0.	-2685.	-3277.	-1591.	0.	0.	0.	0.	-7553.	
Actual consumptive use	249.	352.	571.	1366.	4424.	5735.	6443.	5820.	3797.	1089.	318.	263.	30426.	
Addition to ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
Net water surface evaporation	7.	16.	21.	50.	95.	131.	120.	62.	52.	53.	47.	6.	657.	
M and I consumptive use	1.	1.	1.	2.	2.	2.	3.	3.	2.	2.	1.	1.	21.	
Supply to wetland and ground water	535.	589.	648.	1249.	302.	-2696.	-4501.	-3209.	-1675.	615.	558.	599.	-6985.	
Precipitation on wetland	37.	12.	100.	109.	56.	31.	83.	122.	166.	43.	78.	49.	886.	
Wetland consumptive use	12.	17.	28.	48.	83.	169.	280.	281.	173.	86.	20.	13.	1211.	
Precipitation and consumptive use on idle land, native vegetation and town and community areas													31951.	
Change in ground water storage	560.	584.	719.	1310.	275.	-2834.	-4698.	-3369.	-1681.	573.	616.	635.	-7310.	

TABLE 132.--Annual water budget, Junction (2B2-3), Beaver River Basin

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Ground water inflow from other watersheds	417.	417.	417.	417.	416.	416.	416.	416.	417.	417.	417.	417.	5000.
Tributary inflow	109.	164.	218.	764.	1963.	927.	273.	273.	218.	218.	164.	164.	5455.
Pumped irrigation water	0.	0.	0.	0.	6198.	10965.	13825.	10488.	6198.	0.	0.	0.	47674.
38 percent to root-zone	0.	0.	0.	0.	2355.	4167.	5253.	3985.	2355.	0.	0.	0.	18116.
Precipitation on cropland	1536.	2338.	1305.	285.	1264.	1115.	884.	0.	1128.	1237.	27.	1074.	12192.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	1536.	2338.	1305.	285.	3619.	5281.	6137.	3985.	3483.	1237.	27.	1074.	30309.
Potential consumptive use on irrigated cropland	199.	305.	388.	1614.	3866.	6963.	8405.	7195.	4522.	1248.	505.	248.	35460.
Supply minus use	1337.	2033.	917.	-1329.	-247.	-1682.	-2268.	-3210.	-1039.	-11.	-478.	825.	-5152.
Cumulative soil moisture (maximum capacity-5,628 a.f.)	3531.	5564.	6481.	5152.	4905.	3223.	955.	0.	0.	0.	0.	825.	
Consumptive use deficit	0.	0.	0.	0.	0.	0.	0.	-2255.	-1039.	-11.	-478.	0.	-3783.
Actual consumptive use	199.	305.	388.	1614.	3866.	6963.	8405.	4940.	3483.	1237.	27.	248.	31677.
Addition to ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Net water surface evaporation	-2.	-4.	24.	63.	83.	113.	132.	128.	93.	56.	58.	4.	747.
M and I consumptive use	1.	1.	1.	2.	2.	2.	3.	3.	2.	2.	1.	1.	21.
Supply to wetland and ground water	527.	584.	610.	1116.	-61.	-2938.	-4700.	-3427.	-1815.	577.	522.	576.	-8429.
Precipitation on wetland	96.	146.	82.	18.	79.	70.	55.	0.	71.	78.	2.	67.	764.
Wetland consumptive use	10.	15.	19.	57.	73.	140.	242.	273.	206.	98.	32.	12.	1177.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													27551.
Change in ground water storage	613.	716.	673.	1077.	-55.	-3008.	-4887.	-3700.	-1950.	556.	492.	632.	-8841.

TABLE 133.---Annual water budget, Junction (2B2-3), Beaver River Basin

	CALENDAR YEAR 1963												Annual
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	
Acre-Feet													
Ground water inflow from other watersheds	417.	417.	417.	417.	416.	416.	416.	416.	417.	417.	417.	417.	5000.
Tributary inflow	124.	186.	248.	869.	2236.	1056.	310.	310.	248.	248.	186.	186.	6207.
Pumped irrigation water	0.	0.	0.	0.	6460.	11429.	14410.	10932.	6460.	0.	0.	0.	49691.
38 percent to root-zone	0.	0.	0.	0.	2455.	4343.	5476.	4154.	2455.	0.	0.	0.	18883.
Precipitation on cropland	326.	1155.	639.	1400.	0.	748.	136.	2623.	2596.	897.	3289.	0.	13810.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	326.	1155.	639.	1400.	2455.	5091.	5612.	6778.	5051.	897.	3289.	0.	32693.
Potential consumptive use on irrigated cropland	197.	430.	449.	1124.	5121.	6832.	9065.	7509.	4926.	1537.	357.	252.	37799.
Supply minus use	129.	725.	189.	276.	-2666.	-1742.	-3454.	-731.	125.	-640.	2932.	-252.	-5107.
Cumulative soil moisture (maximum capacity-5,628 a.f.)	955.	1680.	1869.	2145.	0.	0.	0.	0.	125.	0.	2932.	2680.	
Consumptive use deficit	0.	0.	0.	0.	-520.	-1742.	-3454.	-731.	0.	-515.	0.	0.	-6962.
Actual consumptive use	197.	430.	449.	1124.	4600.	5091.	5612.	6778.	4926.	1022.	357.	252.	30838.
Addition to ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Net water surface evaporation	9.	7.	30.	43.	115.	109.	160.	70.	52.	63.	28.	14.	699.
M and I consumptive use	1.	1.	1.	2.	2.	2.	3.	3.	2.	2.	1.	1.	21.
Supply to wetland and ground water	531.	595.	634.	1241.	80.	-2982.	-4913.	-3501.	-1844.	600.	574.	588.	-8396.
Precipitation on wetland	20.	72.	40.	88.	0.	47.	9.	164.	163.	56.	206.	0.	865.
Wetland consumptive use	10.	21.	22.	40.	96.	137.	261.	285.	224.	121.	22.	12.	1252.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													31191.
Change in ground water storage	542.	647.	652.	1289.	-16.	-3072.	-5166.	-3622.	-1905.	535.	758.	576.	-8783.

TABLE 134.--Annual water budget, Junction (2B2-3), Beaver River Basin

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
	Acre-Feet												
Ground water inflow from other watersheds	417.	417.	417.	417.	416.	416.	416.	416.	417.	417.	417.	417.	5000.
Tributary inflow	103.	154.	205.	718.	1846.	872.	257.	257.	205.	205.	154.	154.	5131.
Pumped irrigation water	0.	0.	0.	0.	7422.	13130.	16556.	12560.	7422.	0.	0.	0.	57089.
38 percent to root-zone	0.	0.	0.	0.	2820.	4989.	6291.	4773.	2820.	0.	0.	0.	21694.
Precipitation on cropland	843.	408.	2120.	1495.	1087.	666.	979.	1291.	544.	54.	951.	992.	11431.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	843.	408.	2120.	1495.	3908.	5655.	7270.	6064.	3364.	54.	951.	992.	33125.
Potential consumptive use on irrigated cropland	236.	240.	379.	1193.	3921.	6885.	9390.	7291.	3940.	1335.	295.	296.	35399.
Supply minus use	607.	167.	1741.	302.	-13.	-1229.	-2120.	-1227.	-576.	-1281.	657.	697.	-2274.
Cumulative soil moisture (maximum capacity-5,628 a.f.)	3287.	3455.	5196.	5498.	5485.	4256.	2137.	910.	334.	0.	657.	1353.	
Consumptive use deficit	0.	0.	0.	0.	0.	0.	0.	0.	0.	-947.	0.	0.	-947.
Actual consumptive use	236.	240.	379.	1193.	3921.	6885.	9390.	7291.	3940.	388.	295.	296.	34452.
Addition to ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Net water surface evaporation	5.	13.	16.	38.	78.	101.	131.	89.	74.	67.	49.	4.	666.
M and I consumptive use	1.	1.	1.	2.	2.	2.	3.	3.	2.	2.	1.	1.	21.
Supply to wetland and ground water	514.	557.	605.	1095.	-638.	-3804.	-5752.	-4192.	-2274.	553.	521.	566.	-12250.
Precipitation on wetland	53.	26.	133.	94.	68.	42.	61.	81.	34.	3.	60.	62.	716.
Wetland consumptive use	11.	12.	19.	42.	74.	138.	271.	277.	179.	105.	18.	14.	1161.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													25818.
Change in ground water storage	556.	570.	719.	1146.	-644.	-3901.	-5962.	-4388.	-2420.	451.	562.	613.	-12695.

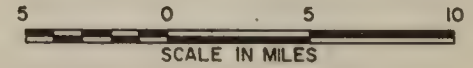
TABLE 135.--Annual water budget, Junction (2B2-3), Beaver River Basin

	CALENDAR YEAR 1965												Annual
	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	
	Acre-Feet												
Ground water inflow from other watersheds	417.	417.	417.	417.	416.	416.	416.	416.	417.	417.	417.	417.	5000.
Tributary inflow	136.	204.	272.	952.	2449.	1157.	340.	340.	272.	272.	204.	204.	6802.
Pumped irrigation water	0.	0.	0.	0.	6858.	12134.	15300.	11607.	6859.	0.	0.	0.	52758.
38 percent to root-zone	0.	0.	0.	0.	2606.	4611.	5814.	4411.	2606.	0.	0.	0.	20048.
Precipitation on cropland	639.	856.	1183.	3181.	1006.	258.	1604.	652.	1115.	68.	2025.	2610.	15196.
Direct use ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Total root-zone supply	639.	856.	1183.	3181.	3612.	4869.	7418.	5063.	3721.	68.	2025.	2610.	35244.
Potential consumptive use on irrigated cropland	300.	276.	453.	1278.	3498.	6149.	8547.	7005.	3322.	1279.	533.	266.	32905.
Supply minus use	339.	580.	730.	1903.	114.	-1279.	-1129.	-1942.	399.	-1211.	1493.	2344.	2339.
Cumulative soil moisture (maximum capacity-5,628 a.f.)	1692.	2272.	3002.	4904.	5019.	3739.	2611.	668.	1067.	0.	1493.	3836.	
Consumptive use deficit	0.	0.	0.	0.	0.	0.	0.	0.	0.	-144.	0.	0.	-144.
Actual consumptive use	300.	276.	453.	1278.	3498.	6149.	8547.	7005.	3322.	1135.	533.	266.	32762.
Addition to ground water	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Net water surface evaporation	6.	9.	25.	20.	75.	104.	100.	87.	48.	67.	39.	-11.	570.
M and I consumptive use	1.	1.	1.	2.	2.	2.	3.	3.	2.	2.	1.	1.	21.
Supply to wetland and Ground water	546.	611.	663.	1347.	182.	-3144.	-5161.	-3744.	-1967.	620.	581.	631.	-8837.
Precipitation on wetland	40.	54.	74.	199.	63.	16.	100.	41.	70.	4.	127.	164.	952.
Wetland consumptive use	15.	14.	22.	45.	66.	123.	246.	266.	151.	101.	33.	13.	1096.
Precipitation and consumptive use on idle land, native vegetation and town and community areas													34333.
Change in ground water storage	571.	651.	715.	1501.	180.	-3251.	-5307.	-3969.	-2049.	524.	674.	781.	-8980.



WATER BUDGET BOUNDARY
AND
INDEX
NORTH PORTION
BEAVER RIVER BASIN
UTAH- NEVADA

June 1971



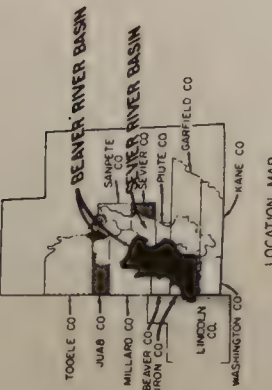
LEGEND



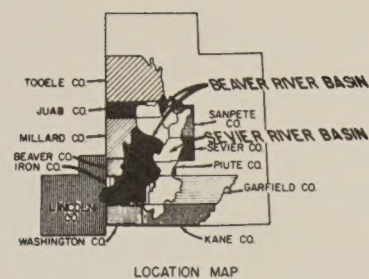
Water Budget Areas



Water Budget Area Number



LOCATION MAP OF SUB-BASINS



LEGEND

Water Budget Areas

2B2-1 Water Budget Area Number



WATER BUDGET BOUNDARY AND INDEX

SOUTH PORTION

BEAVER RIVER BASIN

UTAH-NEVADA

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5 0 5 10

SCALE IN MILES

